An Introductory Address

DELIVERED AT

MIDDLESEX HOSPITAL, LONDON,

On October 1st, 1883,

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GENTLEMEN,—With my first word I would, in the name of my colleagues, welcome you, one and all, to-day. Some of you are stepping over the very threshold of that professional life to which you aspire. Others of you have advanced more or less far along its path. But whether here as freshmen, as seniors, or as past students, we are equally glad to meet you, and to wish you well, at this the commencement of another medical year.

Those of you who met here twelve months ago will not have forgotten the sad cloud which then hung over the proceedings, and threw a cold gloom over the opening days of the session. He who was to have addressed you lay dead, called upon, apparently far too soon, to lay aside the toil which had been so pleasant to himself and so beneficial to you. Mr. Lyell had not lived long enough to win for himself loud-tongued popular applause; but here, in his adopted professional home, he had lived so well and worked so earnestly, that he quickly won, and to the last held, a very high place in the esteem of all who knew him. It was never my privilege to know Mr. Lyell intimately, and it would therefore be unbecoming in me to speak of him in anything more than general terms in the presence of many who knew him well and who watched him day by day in his patient labours. You know his sterling uprightness, you have seen his earnestness of purpose, you are witnesses of his ability, and his thorough knowledge of his profession, and many of you have profited largely by his marked success as a teacher. I scarcely need to remind you of these things nor to urge you to cherish and to honour the memory of so good a man. It may well fill us with painful wonder when we have to stand by and to see a life so full of promise so soon cut off, when an abundant seed-time has no harvest, and bright hopes are early blasted. But happy is it when with the feeling of wonderment is blended the grateful recollection of large powers used with a noble unselfishness that withholds not life itself. And such is our memory of Robert Wishart Lyell! Believe me, sirs, the years of such men's lives are weighed, not counted.

By the death of Dr. Alexander Patrick Stewart at the ripe age of seventy, which occurred towards the close of last session, we have lost a member of our consulting staff whose name will never be forgotten while the history of medicine is preserved, and whose memory will always be affectionately cherished by those who were honoured with his friendship. It is now seventeen years since he severed his connexion with the school and the active duties of the hospital, but to the last he retained a keen interest in both, which he was quick to show when any occasion demanded it. A sketch of his life, could I have drawn it, might have worthily formed the subject of the address to-day; but that was only to be attempted by one who, from constant association with him, could appreciate his private worth and professional attainments. When but a young man of twenty-seven he wrote a paper, founded upon observations made while he was house-surgeon at the Glasgow Infirmary, whereby he established his claim to rank among the very first physicians of the age. In it he suggested that typhus and typhoid fevers are two distinct affections, unlike in their origin, course, and mode of propagation, and in this he was the first. It is but just to his memory to assert that the service he thus rendered scarcely met with due acknowledgment; but he, happily, sought elsewhere for approval of his actions, and his blameless life secured him that which no popular applause could ever have won for him. Dr. Stewart was a man eminent for his Christian virtues. Possessed of high birth, and a finely cultured mind, he happily combined with these a gentle spirit, and cheerfully accepted as his guide in life the precepts of the New Testament. He was thus enabled to live above the touch of slander, a praise among his friends—of enemies, he had none. In his early devotion to his profession, his careful and accurate observations, and in his Christian integrity and manly defence of all that he held to be true and just, he sets everyone of us a worthy example. And whenever in after life you meet with his name—as often you will—and are reminded of his great work, do not think of him simply as a wise physician, with remarkable insight into disease, but remember him also as a good man. Notwithstanding his professional attainments and charming personal character, Dr. Stewart failed to attain the highest rewards of his profession. And it is well that you should know that this was simply due to habits of unpunctuality, which in him became so exaggerated that it was impossible for him to undertake many of the responsibilities of his calling. This peculiarity he seems to have inherited from his father; but it is very remarkable that one possessed of so much strength of character, so strict in his views of duty, so unflinching in his adhesion to truth, should have been enslaved by a habit that men of far inferior gifts and motives find no difficulty in withstanding. But so it was.

There is one event in medical politics that has occurred during the recent session of Parliament that calls for a brief notice at my hands. A Royal Commission having been appointed to examine into the mode of granting licences to practise medicine and surgery in the United Kingdom, reported against the system at present existing, and made certain excellent recommendations. A Bill was introduced by the Government embodying these proposals, and was quickly passed through the House of Lords. But the obstructive tactics of individuals and bodies, not wholly disinterested, prevented its being read a second time in the House of Commons. There can, however, be no doubt that the Bill in its main provisions gave intense satisfaction to the general body of the profession, and it is to be hoped that the only result of the tactics of the representatives of the obstructive corporations will be that they will obtain less generous terms when the Bill is next presented to Parliament. These particular corporations have degraded the profession and deceived the public, and are not worthy of the sympathy of either of the parties so deeply interested in this great question. The points dealt with in the Bill on which there is a consensus of opinion are three:—1. That everyone shall be required to pass a final examination in the three branches of medicine, surgery, and midwifery, before being eligible for registration as a qualified medical practitioner. 2. That this necessary examination shall be conducted by some body other than any of the existing corporations. 3. That the general body of the profession shall be represented on the boards controlling these examinations. Legislation on these lines is urgently needed, and is confidently expected as one of the earliest results of the coming session of Parliament. I hope that he who addresses you next October will be able to refer to it as an accomplished fact, and it may then be his duty to explain to you the effect of the Act upon your studies and your future course.

[Mr. Gould cautioned his hearers against setting too high a value upon success in competitions for prizes, and urged them to try rather to conquer themselves than to over-reach their fellows.]

Not the smallest of the difficulties that beset the introductory lecturer of to-day is the choice of a subject on which to address his audience. There are very few matters in any way connected with the science and art of medicine that have not formed the theme of introductory lectures. History, biography, philosophy, and morals have all been spoken of over and over again; minute directions as to the best mode of study, the medical curriculum, medical examinations, and the preparatory training for the profession, have all been dilated on year by year; and exhortations, warnings, encouragements, and even discouragements have been lavishly given. I feel it impossible to say anything new to you, and not less so for me to put old truths or arguments with as much force as has been done by others, and had I the courage of my convictions I should discharge my obligation to you to-day by reading one of the classical addresses that are admitted to have a permanent value. I propose, however, to refer briefly to some points connected with the manner in which your studies here should be conducted. I offer no apology for this subject. It is important that you should commence your work with an intelligent appreciation of its purpose, and of its method; and as, in the hurry of your student life there is danger that these may

be lost sight of, it is well from time to time to have your attention recalled to them. To take up every subject in the curriculum, and to dilate upon its value, and upon the mode of study best adapted to acquaint you with it, would of necessity be very wearisome, and I purpose to deal with two points only—one of them having a special bearing upon the work of freshmen, the other being of interest rather to the seniors.

We are all of us apt to be unduly influenced by the pressing matters of our daily life; and I should not be surprised if some of you therefore regard as the object of your highest ambition the possession of a double diploma in the shortest time allowed by law. It may appear to you that if only you are able to pass your primary examination at the Royal College of Surgeons at the end of your second winter of study, and then to pass the final examinations for the diplomas of member of the College of Surgeons and licentiate of the College of Physicians two years later, you will have good reason for self-gratulation, and that you will never be able to reproach yourselves with having misspent these precious years of your life. But the science and art of medicine is one thing, and the science and art of passing examinations in it quite another. Yet, as the demand for the one is immediate and pressing, it is often difficult to keep the mind always engaged in the higher, grander work of unravelling the secrets, and becoming acquainted with the laws, of Nature.

I know of no reason why I should speak evil to you of examinations; there is an element of evil in them, as in most things human, and were I so inclined I might seize this, exaggerate it, and, disregarding all their countervailing merits, win the hearty applause of those of you who have not yet finished with them, by assuring you that they are fallacious tests of knowledge, the chief cause and encouragement of faulty modes of study, and, as being both deceitful in their results and encouraging deceit in the candidates, to be avoided and spurned by all honest men. But examinations properly conducted are of the highest value, if the limit of the test they afford be steadily kept in mind. Good as they are, however, the concurrent experience of all candidates is that no examination has yet been devised which is so good as to justify its repetition; and although there are some who linger fondly round examination halls and coquet with their diplomas in strange fashion, they are in the habit of explaining their conduct by the malign action of some ogreish examiner rather than by their high appreciation of the delights of oral examinations. Pass your examinations as quickly as you can; but remember that unless you have far better qualifications for practice than the possession of two parchment rolls you will come short of success both as students and as practitioners. Dismiss from your minds at once all such crude notions as that our work as teachers has no higher aim than to enable you to obtain diplomas in the shortest possible time. Diplomas are but the outward and visible sign of a minimum of inward knowledge and education, and in that they testify to *knowledge* rather than to *understanding* they fail, and always must fail to some extent, in their chief purpose.

It is now generally recognised that the purpose of education—as indeed the word itself denotes—is not so much to store the memory with facts as to develop and train all the mental faculties, of which memory is but one. The study of medicine and the sciences upon which it rests is eminently adapted to render this training of your natures complete. Your work will educate many of your bodily powers to a high degree. The practical study of anatomy, of histology, and of ophthalmology will train your eye; the careful practice of stethoscopy will develop your ear; and how can you better train your muscular sense than by dissecting or operating, or by acquiring that gentle strength so valuable in such manipulations as the setting of fractures? You will, however, need to supplement this by some athletic exercise; which should be more vigorous than the act of drawing a pipe, and taken in air clearer and purer than is to be found in a public billiard room. In regard to your mental faculties, it is the case that few pursuits are better adapted for training the memory than are anatomy and materia medica. The faculty of observation may be cultivated to its highest pitch by dissection, botany, histology, and the clinical observation of disease. You will find that the development of your powers of imagination is amply secured by a credence of therapeutical records, and the problems of diagnosis will train your judgment as few other pursuits can. Nor is the moral side of your nature uncared for. No thoughtful man can witness unmoved the unrelenting course of Nature, or her wonderful adaptation of means to ends, her patience, or her mystery. To be brought into contact with all classes of your fellow men, under all the varying conditions of pain and disappointment that form so great a share in the lot of everyone of us; to have the responsibility of life and death resting with you, and to be the depositary of secrets more sacred than those of priest—for while his refer only to the hidden past, yours often reach on into the veiled future, and enable you to foretell the slow but certain march of events unborn,—these things, with many other incidents of your daily life, are fitted to raise you above the level of our common fallen humanity, and to cleanse the inner currents of your life.

You will believe me when I say that your first aim should be to understand the body in health. The processes and conditions of disease are but modifications of those of health, even although their causes may, in some instances, be organised bodies introduced from without, and the events in their life history. Nor is there a sharp boundary line, on the one side of which is health, and on the other disease; the one state passes by imperceptible gradations into the other. We speak of a standard of health, but it is easier for physiologists to define than for physicians to recognise; and while we can formulate in our minds the earliest steps in morbid processes, they are so minute that we can only observe them in the mass. It is like the growth of the individual. We can define an infant, a boy, a youth, a man, and an old man. We can recognise at a glance well-marked examples of each class, but the progress from one stage to another is so gradual that it is impossible to state precisely where the infant becomes the boy, the boy becomes the youth, the youth the man, and the man becomes senile.

Much of your work in the future will consist in preventing and treating affections which, so far as we know at present, originate in trifling and imperceptible disturbances of the processes of health, and which, allowed to go on unchecked, culminate at length in obvious disease. The anæmia met with so often in the inhabitants of large towns, the combined result of bad air, deficient sunlight, unsuitable food, injurious habits of various kinds, overwork and worry, is a case in point. Nor could I choose a better example than is afforded by chronic alcoholism, the sum of the effects of a long-continued indulgence to excess in alcohol. Your first two years will be devoted almost exclusively to the study of the body in the condition of health, and inasmuch as the knowledge then gained is the foundation on which all that follows after must rest, and sets limits to it, and as in those years habits of study, good or bad (to say nothing of habits of life), will be formed by everyone of you, which will help or hinder you in all your subsequent career, you cannot be too intent upon setting out upon the right road under wise guides. This study you will carry on in the classes of anatomy including histology, and physiology including all that part of chemistry which refers to the tissue-changes of the body. Anatomy deals simply with the structure of the body, the form, relations, connexions, and consistence of its various component parts; it is a study of physical characters only, and can therefore be conducted on the body after death. Physiology, on the other hand, has nothing to say to structure as a physical phenomenon, but deals with the function, the use of every part, explains the "why" and "wherefore" of every physical feature, and is an exposition of all by which a body during life is distinguished from the same body after death. The wide extent of each of these studies necessitates their being taught in separate classes; but the severance thus made—partial though it be, and of quite recent growth—has rather tended to obscure the essential unity and interdependence of the two sciences. Of late we have heard eloquent dissertations on the *relative* value of these twin sisters, which is as well worthy of discussion as is the relative value of maiden beauty and the power of vision to discern it. The relation between structure and function is a problem of the greatest interest, and the degree in which each is dependent upon the other is by no means a settled point. Viewed historically, anatomy certainly precedes physiology, and the starting-point of physiological science—the discovery of the circulation of the blood—rested chiefly upon anatomical observations. The growth of physiology was coincident with a more detailed study of anatomy; then came the microscope, with its wonderful revelations of intimate structure, and, again, physiology expanded; and this aspect of the

science having been fully developed, she is now busying herself with the forces of life itself. So, gentlemen, must it be with you; proceed from anatomy to physiology. If you would learn either well—and this is what I want chiefly to impress upon those who are commencing their medical studies—you must disregard the fact that these two sciences are taught by two lecturers, and view them as one and inseparable. Structure without function is death, and you are here to study life. Function apart from structure is impossible. Unless you study anatomy from the physiological stand-point, you will at best be ignorant of the living body, and blind to the charm that is associated with every scientific pursuit when properly conducted. The mind soon wearies under a load of disconnected facts, but the powers of observation never tire when their acquirements are assimilated by those of the imagination, and association has ever been found to be the chief aid to memory. If therefore you would learn anatomy easily and pleasantly, and would remember it without difficulty, you must search for the physiological equivalent of every anatomical fact. Never be content with any observation until you have grasped the association it has with other facts, and its influence upon the function of the part. To know that the artery of the arm courses along the front of the elbow, while that of the thigh runs along the back of the knee, is to you of small value until you realise the reason for the arrangement, and notice the ill effects that would follow the movements of the joints were the conditions different.

Gentlemen, all this must appear very self-evident to you. But I offer no apology for referring to it, for I have seen only too often the neglect of this truth and practice lead to the shipwreck of the student. It would be no great exaggeration to say that it is the exception rather than the rule for students to study anatomy with what I will call physiological eyes and minds. In place of that they regard it as a dull exercise of memory; the mere addition of fact to fact soon loses all interest to them, and they either lay aside the unwelcome task and abandon themselves to other pursuits not included in their curriculum, or they plod on wearily in their useless work of piling up lifeless "fact-heaps." This is no fancy of mine. The great danger that imperils every one as he enters upon the study of medicine is an unintelligent mode of study; only set out upon your course along the right path, aided by the helps that lie ready to your hand, and you will be safe from the snares and pitfalls that have entrapped the feet of many of your fellows. If you thus study anatomy, not only will you acquire a true scientific knowledge of it, but you will form a habit of thought which will be of the greatest value to you in all your other medical pursuits. What I have said in reference to anatomy applies with equal force to physiology, pathology, medicine, surgery, chemistry, or therapeutics. For example, influenced by this habit of mind, you will not be content to learn simply the mere phenomena of life as described to you by physiologists, but you will push your inquiries into their causes and results, their influence upon each other, and the consequences of their modification. Thus, to be told that the normal frequency of the pulse is seventy-two beats a minute will only prompt you to inquire why it is of this frequency, how this rapidity is maintained, how it may be modified, and what effects such modifications have upon all the parts and functions of the vascular system. Similarly, you will supplement a knowledge of the fact that the temperature of the body is kept at one uniform level independently of the temperature of the surrounding medium, by inquiries as to how this is secured, and into the causes and consequences of its variation. And so he who converts the science of anatomy into a department of physiology will elevate the study of physiology from a survey of the phenomena into an unravelling of the processes of Life. By working thus you will not only train your minds while you are gaining an intelligent—albeit imperfect—knowledge of the living body in health; but the acquisition of a sound knowledge of disease, and insight into its treatment, will be robbed of its chief difficulties. While your faculties of observation, sharpened by daily use, will quickly make you familiar with the commoner and more important features of the disease, your physiological knowledge and instinct will enable you to assign them to their true causes, and to determine the lines along which your efforts at treatment must be planned. You will see in your patients a series of unwilling physiological experiments of endless variety. You will be struck with the fact that in leaving the laboratory for the wards you have not entered upon a new departure in your work, but that health and disease are but manifestations of the reign of the same laws under different conditions. Indeed, if physiology be understood as the science of Life, then all your studies here will be physiological, and should be continuous, as the subdivisions of one great whole.

The same state of mind is just as essential in the study and practice of therapeutics; the difficulties that beset you there are so great that it requires the utmost vigilance to escape from the domination of "rule of thumb" which satisfies too many among us. Your chief safeguard against this danger will be the early formation of the scientific habit, which, becoming a second nature, will render the practice of empiricism almost impossible. Surgical therapeutics, as more scientific and better understood than the uncertain treatment of the physician, will present to you the greater attractions; but each should command your approval only as it can be shown to be in conformity with established physiological laws.

We have lately seen great advances made in the localisation and the precise diagnosis of disease. No one can doubt that this has been of great advantage. But, as students, let me caution you against giving your attention too exclusively to this side of disease, to the neglect of its more general aspects. Remember that you always have in your patient, not a disease so much as a disturbance of the workings of that complex machine whose mechanism you become familiar with in the earlier part of your course. You won't understand me to minimise the importance and value of precise diagnosis, but let not precision in one detail or in one direction be associated with carelessness in and neglect of others. It is quite possible to define with the greatest nicety the extent of consolidation of a lung, and yet fail to distinguish between a case of pneumonia that will quickly end in death and one that will as quickly be recovered from. The best example I can give you, however, is that of fever. The condition of fever is met with in association with very varied states, and the distinctions between different fevers are points to which you will of necessity have to devote much careful attention. But beware lest your desire to be able to distinguish accurately and readily the different febrile diseases from each other lead you to neglect the most careful study of that element which is common to them all—the fever. Among local conditions inflammation affords me a parallel example. Occurring in all tissues, and in many varieties of intensity, with associations the most diverse, it yet is one and the same nutritive disturbance in every case. And therefore, while endeavouring to distinguish different inflammations, don't lose sight of the great uniformity of the process, wherever existing. Degenerations, hypertrophy, tumour formation, and the effects of irritation, are all other examples which I could have used to illustrate the importance of general pathology. Pathology is primarily and mainly general. When you remember that the chief factors in morbid processes—the influence of the nervous system and the circulating fluid—are the same in all tissues and organs, and the intimate processes of nutrition, if not identical, are so closely similar as to be governed by the same general laws, and influenced alike by the same conditions, you will be prepared to find a uniformity in disease as it affects different parts of the human frame. Every local change is a study in general morbid processes, and you will notice that the fact of locality has far more influence upon the effects of disease than upon disease itself. For instance, a cancerous tumour, occurring where it will, affords you a picture not simply or chiefly of a tumour of one special part, but far more strikingly of a particular variety of morbid growth in general; and the knowledge you may gain of its life-history as observed in one region is applicable to a similar growth wherever met with. The importance to the patient of whether the cancer be in the lip or the liver is no doubt vast, but is due to considerations quite other than the nature of the disease from which he suffers.

Take the case of wounds also, and by wounds I mean, of course, all breaches in the continuity of tissues; the modes in which they are produced are but little modified by locality. But of greater interest is it to notice that the healing process is, with insignificant exceptions in matters of minute detail, identically the same in all wounds, whether cutaneous or subcutaneous, whether implicating skin or muscle, or bone or brain; the recognition of this fact simplifies your task as students very greatly. What you see in the healing of a harelip is just what takes—hidden from your view—when a tendon is divided subcutaneously, or in the repair of a well-

set fracture; and the healing of an ulcer in the skin is a picture of the re-formation of a bone after its death and removal by the surgeon. The healing process is not only identically the same in all cases—for it consists essentially in the effusion and subsequent organisation of coagulable lymph,—but the conditions which modify this process, such as position, movement, blood-supply, irritation, and the like, have precisely the same influence upon it in all situations. Thus, it does not require a broken bone to illustrate the causes of non-union of a fracture; a harelip will serve equally well; and from the study of a cut finger we may learn to carry out the treatment of the largest amputation wound.

This fact is not without importance to you. It should add to the interest and zeal with which any case is observed and studied, to reflect that from it lessons can be learnt of general, or even universal, application; the experience gained from any case should extend far beyond that particular example of disease. It is only as you bear this in mind that you can become in any way qualified for practice by the brief term of study demanded by the curriculum. In four short years you cannot become familiar with disease in all its phases, and with every variety of injury. But you can by diligence, and by patient observation, acquire a knowledge of all varieties of morbid processes, and of physiological therapeutics. As new cases of disease come under your care you will then be able to unravel and treat them by the application of this knowledge.

But if this be true, it also has some bearing upon the latest fashion in the profession—that of specialism. There is a spirit of evil abroad that would map out the body into cubic inches, and place each segment in the care of a "special" medical attendant. Each of the natural orifices of the body already has its swarm of "specialists," who buzz about it like some cloud of pestilential flies; and attempts are being made to place every artificial orifice under similar false protection, and to hand over the performance of each single operation to those "specially" devoting themselves to its performance. A certain kind of "specialism" is an unmixed good, and a necessary result of the variations in our lot in life, and in our individual tastes. I need not define this accurately to you. In our hospital staff alone there are several distinguished men, who have added to a wide knowledge and ripe experience of the general domain of medicine or of surgery a special acquaintance with the diseases of particular parts. The department of ophthalmic medicine and surgery has always been distinguished by being largely in the hands of general surgeons, and both it and surgery as a whole have greatly profited thereby. And just in proportion as it slips away from the hands of general surgeons into those of men whose purview is limited to the tiny orbs of vision will it be in danger of falling from its present high position.

But of the common form of "specialism," which may not improperly be called a disgrace of our time, I should be ashamed, in this public place, to tell "the truth, the whole truth, and nothing but the truth." If, however, you are seeking for ignorance of the science they profess, for the dishonest arts which degrade a noble profession to the level of a huckstering trade, it is to the consulting rooms of some of these "specialists" that you must go. Some of the fraternity have one good claim to be called "local specialists," in that they are entirely ignorant of every thing that is outside the small portion of the human frame they have chosen to take under their special care. But lest I should be tempted to speak evil of some of my professional brethren I will not further characterise them. One or two of the evil results of "specialism," however, it will be well for you to be on your guard against. The first of these is the tendency to multiply operative methods of treatment. While not saying that these operative measures are, all of them, or of necessity, bad, yet I believe the measure to which a practitioner resorts to them is a very fair working test as to his position in the descending scale of "specialism." A second result, closely connected with the first, is a tendency to complicate these said operations, to invent elaborate instruments, and to make small and unnecessary modifications in recognised proceedings, so that the individual's practice becomes "special" to himself at the same time that it is limited to one narrow region. In this way a clever "specialist" (of the bad order)—who will, of course, have started a hospital of his own—quickly differentiates his practice completely from that of his better-informed fellows. We won't follow him further. But the result which tells most disastrously upon medical students is the fact that as soon as the diseases of any part are relegated to a "special" department, the study of them is neglected by the general body of students. It thus happens that when they leave their hospital, students are, as a rule, less well-informed in regard to the diseases of the eye, ear, throat, and nose than of any of the maladies which are treated by general physicians and surgeons. This again tends to throw the treatment of such cases into the hands of the "specialist," and a vicious circle is produced. We are bidden, however, to look at the great gains that have resulted from the concentration of experience and observation in certain "special" directions. The fact of the advance is incontestable, but by whom has it been made? The valuable aid afforded by examination of the eye, in cases of diseases of the brain, has resulted from the labours of physicians, not of "pure" ophthalmologists. The modification in the operation of lithotrity, which has reduced its mortality by more than one-half, while extending its range, and which has secured it a permanent place in surgery, was made not by "specialists," who perhaps could count their operations by scores, or even hundreds, but by a general surgeon, whose experience, as measured numerically, was small. I believe that an impartial study of the operation of ovariotomy would show the same fact—viz., that the improvements in the operation which have won for it so high a place in surgery have not been evolved by specialists out of their experience in that operation, but have been the result of the application of general surgical principles, worked out by general surgeons, to this particular case. But I do not make any assertion as regards ovariotomy, lest it should lead to discussion, and a perusal of our medical periodical literature of quite recent times will show you that such discussions are prone to degenerate into unintelligent displays of bad temper.

An examination of the causes of "specialism" would lead me too far; but accept my assurance that none of them apply to you as students, and that the idea of "specialism" should never be for a moment entertained by you. And let me again beg of you not to be ensnared by its existence to neglect the study of any part of the body or of its affections, and to avail yourselves of every opportunity of becoming familiar at least with the apparatus used for the diagnosis of the so called "special" diseases.

And now, gentlemen, it only remains for me to ask you to give yourselves to your work in no half-hearted way. The task before you is no easy one, and it demands and deserves your best energies. The most richly gifted among you will find in it full scope for all his powers; the most humbly endowed may, by patient perseverance and diligent waiting on Nature, learn some of her secrets, and aid her in her task of healing. Your time is short; the graver responsibilities of life will soon be upon the youngest of you, and you must be up and doing if you would not be distanced in your race with Time. You are here to study Nature; take her not alone for your theme, but also for your pattern. You will find her painstaking, persevering, never disheartened by obstacles, full of resource, patiently carrying out her designs through long years or even centuries. Copy her in these things. You will also find that however secret her plans may be, when they are discovered and brought to light they are such as only to excite our admiration as worthy of a God. Imitate her in this, too, and the pure in heart shall see God.

A CONTRIBUTION TO THE SUBJECT OF CEREBRAL LOCALISATION.

BY SEYMOUR J. SHARKEY, M.B.,
ASSISTANT PHYSICIAN AND JOINT LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

(*Concluded from page 585.*)

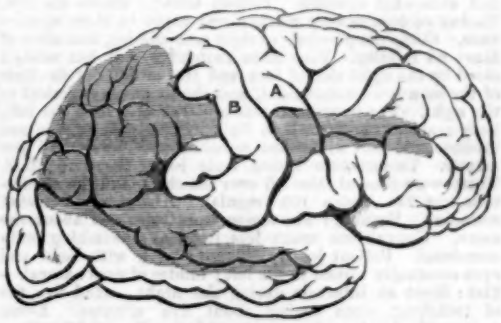
CASE 5.—*Softening of certain parts of the right hemisphere, accompanied by paralysis of the left arm, and paresis of the left leg, mouth, and tongue.* — W. F——, aged sixty-four, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on Jan. 1st, 1878. He said that his father had died at the age of sixty-one "in a fit," and his mother at the age of sixty from a "fit of paralysis"; and that a brother and sister had died at middle age, likewise "in fits." The patient himself had had no serious illnesses, when very nearly three months before admission he was seized with a fit, which produced weakness of the left arm.

The attack was preceded by severe headache. No one saw him while in the fit; he walked home after it, but never returned to work again. On Christmas evening he had another, when his tongue, mouth, legs, and arms were convulsed, and he remained insensible for twenty minutes; he also said his right eye was temporarily blind. He had been an out-patient under Dr. Payne, who made the following note, dated Nov. 24th, 1877: "Local paralysis of the left arm, chiefly of extensors of forearm; cannot straighten hand or rotate wrist; can lift the arm from the shoulder; some stiffness of elbow; the left forearm is half an inch smaller than the right." On admission he was very drowsy and stupid, wandering in his mind at times, and especially at night. He answered questions sensibly, however, though his memory was bad. He was able to walk into the hospital, in spite of some weakness in the left leg. There was evident weakness and wasting of the left arm and forearm, especially of the extensor muscles, but there was no wasting of the muscles of the hand. The elbow-joint was stiff, but the fingers were not flexed. There was some left facial paralysis, and protrusion of the tongue to the left. He took food very badly. The heart and lungs were normal. The urine had a specific gravity of 1025, and contained no albumen. The bowels were confined. — Jan. 5th: In much the same condition as on admission; very drowsy and stupid, but noisy at night; passes his urine in bed; bowels not open.—11th: Very sleepless and restless at night; condition of arm and leg much the same; sensation universally impaired, a condition probably due to his mental hebetude.—18th: Continually trying at night, and even in the day, to get out of bed; movements very slow; intellect very dull.—25th: Sleepy in the day and rambling at night, the rambling being a low, feeble, muttering delirium; face expressionless; able to see well with both eyes, and with each individually; right pupil now, as all along, much contracted. — Feb. 2nd: Temperature during the last few days high, ranging between 100° and 103°; patient gradually sinking; fundus of eyes healthy. Died in the evening.

Post-mortem examination.—No serious disease of any organ was found except of the brain. The membranes were healthy, but the superficial vessels were rather injected; no thrombosis was discovered. The external surface of certain portions of the right hemisphere was markedly softened, so diffluent, indeed, that it broke down under a stream of water, and it was of a yellowish-white colour. The following were the regions affected:—There was a patch of softening, which ran forward from the ascending frontal convolution into the middle, and to a very slight extent into the inferior frontal, convolution. There was another rather long area of softening in the posterior part of the right hemisphere, involving the superior parietal lobule and the posterior lobe in its neighbourhood, the angular gyrus, and a small portion of both the superior and middle temporo-sphenoidal convolutions. The softening here extended somewhat deeply, and even reached the posterior part of the optic thalamus, a small portion of which was softened. The corpus striatum was healthy, as was the whole of the left cerebral hemisphere.

Remarks.—The probable course of events in this case was as follows:—1. Three months before admission, in October, the patient had a sudden fit from which he recovered with permanent paralysis of the left arm. This Dr. Payne described six weeks or two months later as a local paralysis mainly confined to the forearm. This attack was doubtless due to the softening of the ascending frontal convolution on the right hemisphere, as shown in Fig. 4. 2. While still in this condition, at the end of December he was again suddenly seized with convulsions and temporary loss of sight in one eye. A week later, on admission, he was found to have the old affection of the left forearm, together with slight weakness of the left leg and some paralysis of the left side of the face and tongue. The second fit and the additional symptoms which followed it were no doubt due to the large area of softening marked in the diagram, which occupied the posterior parts of the hemisphere, and to some extension of the original disease in the frontal convolution. The slight permanent weakness of the leg probably resulted from the softening involving the upper part of the ascending parietal convolution which is part of the centre for the opposite leg. On comparing the position of the softened area in the ascending frontal convolution with Ferrier's diagram of the motor centres, it will be found to occupy the parts to which are attributed the movements of the angle of the mouth, the ala nasi and the lower lip of the opposite side. Immediately below it are the centres for the mouth and tongue, and immediately above it that for the movements of the forearm. Charcot and Pitres, too, conclude that the centres for the arm are in the middle third of the ascending frontal convolution. Although these centres may be diagrammatically marked off from each other, we cannot pretend to any precise knowledge of their exact limits, if, indeed, these physiological territories have definite boundaries at all. At any rate, the case affords striking confirmation of those experiments and observations which have

FIG. 4.



resulted in our localisation of centres for the arm and mouth in the ascending frontal convolution. The patient asserted that after his second fit he had temporary blindness, and that in the right eye. Such was his mental condition on admission that much reliance could not be placed upon the exactness of his memory. But supposing his statement to have been correct, the visual defect probably depended on disease of the angular gyrus, occipital lobe, or posterior part of the optic thalamus, all three regions which were affected in his case, and are supposed to have some connexion with sight. Any more precise statement than this cannot be made.

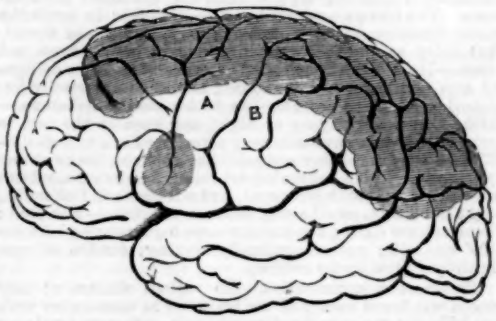
CASE 6. *Convulsions and paralysis of the right side of the body, due to acute inflammation and destruction of certain parts of the cortex of the left cerebral hemisphere.*—E. P——, aged twenty-two, was admitted into St. Thomas's Hospital, under the care of the late Dr. Murchison, on Jan. 19th, 1879. She was a servant, and said to be a nervous, timid person, and occasionally "to do queer things." She had been in her ordinary health until Jan. 13th, when she suddenly had a rigor accompanied by pain in the head, which was so severe that she would not allow her hair to be combed. Since the 15th she had vomited about twice a day, and had had two actions of the bowels every twenty-four hours. She had never had any serious illness before. Two hours after admission the patient was lying on her back, quite unconscious, with the mouth partially open, and passing everything under her. Her face had a somewhat bluish tinge, there was a little sordes on the teeth, and the tongue was quite dry and brown. The head was turned to the right, but was not fixed rigidly in that position, and the eyes usually looked in the same direction. At times, but only very rarely, the patient was quite motionless; generally twitchings of some part of the right side of the body could be observed. When not twitching, the right arm and leg seemed to be quite paralysed, and dropped heavily when raised. The limbs on the left side were in a kind of cataleptic condition, and remained in whatever position they were placed. On the right there was less twitching in the leg than elsewhere, and it appeared to affect mainly the tibialis anticus, so that the foot was drawn inwards and partially flexed. Sometimes when the arm was quiet the right side of the face twitched, and the tongue while in the mouth was jerked to the right. At other times only the right occipito-frontalis muscle was affected, and the forehead presented fitful wrinkles. Sometimes all remained still except the right arm and fingers, the flexors of which were convulsed. At intervals a calm occurred, and all was motionless; and then again the twitchings would pass into a general convulsive storm, accompanied by cyanosis of the face, but not by foaming at the mouth. On these occasions the triceps could be felt contracting as well as the biceps. The pupils were equal, and contracted very imperfectly to light; the conjunctivæ were insensible. Taches cérébrales

were very well marked, though they were slow in making their appearance. The abdomen was rather flat, and there was no evidence of disease of the liver or spleen. There was no affection of heart or lungs to be detected, but there was slight œdema of both legs. The urine had to be drawn off, and had a sp. gr. of 1036, contained a considerable amount of pale lithates and some albumen, but no sugar. The temperature on admission was 104·7° F., but fell to 102° F. in two hours.—Jan. 20th, morning: No vomiting; bowels confined Twitching hardly ceased the whole of yesterday, though it was a good deal less in the night. Patient very flushed, and somewhat cyanotic. Tongue brown; sordes on lips. Taches cérébrales very marked and rapid in their appearance. Complete paralysis of right arm and leg, but none of face; no rigidity. Very little twitching now, but while I stood by the right side of face and the muscles of the floor of the mouth were convulsed, and the tongue was jerked to the right. The right pupil was a little larger than the left, both reacted imperfectly to light. The patient was not unconscious, but somewhat sensible, and recognised her master. Temperature varied from 101·2° F. to 103·2° F. There were general râles all over the chest, and the respiration was 24. Pulse 108, regular. Abdomen somewhat retracted. Evening: The temperature remained about the same. Convulsions much less frequent; twitching only occasional. Patient less intelligent; lying with head and eyes constantly turned to the left; fundus of eyes natural.—21st: Slept at intervals during the night. Had five fits of twitching, each lasting about five minutes. Lying now with head and eyes turned to the right. Face flushed; pupils equal and dilated. Temperature 99·8° F.; pulse 100, regular. Breathing very quietly. — 22nd: The patient seemed much more conscious; she put out her tongue when asked, and answered questions in monosyllables. The right side was quite paralysed (both arm and leg), and the tongue protruded to the right. During the night she had innumerable fits of twitching, confined to the right side of the body. Sometimes the arm, leg, or face twitched separately, sometimes together, and there were great variations in the force of these movements in the different parts affected. Pulse 64, regular. —23rd: The patient had a good night, and was quite intelligent on awaking. She answered questions, and spoke to those around, although with some difficulty. The tongue could not be completely protruded and diverged to the right. There was complete hemiplegia, but sensation was perfect. No more convulsions. Pulse 108, regular; temperature normal. The patient passed her evacuations in bed. Urine: specific gravity 1030, contained a trace of albumen and a deposit of lithates.—24th: The patient was very much better, and quite sensible. She slept all night. She could move her right leg a good deal, and her right arm a very little. The tongue still protruded somewhat to the right. Pulse 112, regular. Taches cérébrales rapidly developed and well marked. The patient had had no convulsions since the day before, but she complained of pain in the head. Temperature 100° F.—27th: No improvement during the last three days. Though the temperature remained low and there were no convulsions, the patient continued very drowsy and stupid. She could move her leg well, her arm not at all.—28th: The patient gradually passed into a condition of stupor, and died.

Post-mortem examination.—On removing the calvaria the left half of the dura mater was found to be very opaque, and the whole of the left side of the brain appeared swollen. On removing the dura mater thick, creamy, healthy-looking pus exuded, and an extensive serpiginous loss of substance was observed occupying the vertex of the left hemisphere, and extending to some little depth into the convolutions. On the dura mater covering this area was well formed, moderately recent lymph. The site occupied by these acute inflammatory changes included the superior parietal lobule, together with some of the adjacent occipital lobe, the upper part of the two ascending convolutions, and part of the posterior portions of the two superior frontal convolutions. A portion of the angular gyrus was also involved. Along the great longitudinal fissure a strip of brain substance still remained unaffected. At the point of junction of the inferior frontal and ascending frontal convolutions on the left was a small patch of thick adherent lymph, with apparently some very slight destruction of the tissues below. The rest of the brain seemed healthy. There was no disease of bone or venous sinuses, nor anything to explain the origin of the cortical lesion. The spleen was enlarged; the lungs, liver, and heart were healthy, and the kidneys much congested, but otherwise normal.

Remarks.—This is a remarkable case from at least two points of view: firstly, from the obscurity which exists as to the origin of the localised destructive meningo-encephalitis; and, secondly, from the fact that a complete hemiplegia was produced, the component factors of which were due to two distinct cortical lesions. The case is nevertheless a typical though unusual example of cortical disease, presenting an association of convulsive and paralytic phenomena, without any loss of sensation. The twitchings and paralysis of the right arm and leg were no doubt due to the large serpiginous area of softening on the vertex, which, running from behind forwards, destroyed the upper portions of the two ascending convolutions, and so disorganised the centres of the opposite leg and part of those of the opposite arm. The convulsions of the mouth and tongue were due to a separate lesion of limited extent at the lower part of the ascending frontal convolution where it joins the inferior frontal. It is probable that this lesion was of slightly more recent date than

FIG. 5.



the larger one, or at any rate not so rapidly destructive; for it was still in the irritative stage, producing convulsions without paralysis, when the larger lesion had produced destruction of brain substance with paralysis. The presence of a cataleptic condition in the limbs on the left side is a point of interest. Very little is known about the pathology of catalepsy, but Eulenberg, in his article on the subject in "Ziemssen's Cyclopædia," quotes two cases which occurred with cerebral disease. In one case there was, "besides a serous effusion in the arachnoid, a softening of the corpus striatum and optic thalamus, especially on the left side; along the posterior surface of the spinal cord, from the cervical to the lumbar enlargement, was a brownish-red, jelly-like mass, arranged in groups, covering the dura mater. The spinal cord seemed healthy." In the other there was "an epithelioma growing from the dura mater over the ethmoid bone; the anterior third of the right hemisphere, as far as the cortex, was much softened, also the outer part of the right corpus striatum."

After a consideration of all the cases of recorded cortical lesions which they have been able to collect, Charcot and Pitres formulate certain conclusions, and it will be well to see how far the six cases just described harmonise with them. The authors referred to divide their cases into those of: (1) Total hemiplegia, (2) associated monoplegia, (3) pure monoplegia. It is only necessary here to refer to the cases of associated and pure monoplegia, since if it is true that they can be produced by lesions of a portion of the motor zone, it stands to reason that total hemiplegia will result from lesions co-extensive with the whole or a large part of that zone. Charcot and Pitres say that when, in consequence of a cerebral lesion, paralysis of the upper limb of one side and of the corresponding half of the face occurs, the lower limbs remaining unparalysed, we are right in concluding that the lesion is situated in the lower half of the cortical motor zone of the opposite side. The symptoms and the pathological condition present in Case 4 are in accordance with this dictum. Another of their conclusions is that when in consequence of a cerebral lesion the limbs on one side of the body become and remain paralysed, the face remaining normal, one can almost certainly conclude that the lesion occupies the superior half of the cortical motor zone on the side opposite to the paralysed limbs. Case 6 illustrates this rule, although it is

not an exact example of the cases referred to. For in it the face was affected, but only owing to the presence of a quite separate small lesion involving the lower part of the motor area. The lesion which produced paralysis of the leg and arm was evidently that which occupied the upper part of the motor zone.

Passing now to cases of monoplegia, Charcot and Pitres say that facial monoplegia results from lesions of "the inferior extremity of the two ascending convolutions, and specially of the ascending frontal." Case 3 illustrates this proposition, and likewise the fact that when the lesion is on the left side of the brain aphasia also occurs, the disease then involving the posterior part of the third frontal convolution as well. In speaking of pure crural monoplegia, the authors say that it is extremely rare. They conclude that the region presiding over the movements of the lower limb in man is situated in the paracentral lobule of the opposite side. In Case 1 the paracental lobule was involved, but the lesion likewise extended over the upper part of the ascending convolutions on the external surface of the hemisphere. Now, on referring to the plan of the cortical centres given by Ferrier, we find that for the leg much more extensive than the paracentral lobule, which Charcot and Pitres suppose to be the centre of the lower limb. In Ferrier's plan it extends along the upper extremity of both ascending convolutions. This view is supported by Case 5, where the leg as well as the arm were affected, though the former was only very partially paralysed. This appears to have been due to the softening invading the upper portion of the ascending parietal convolution. Case 6 also supports Ferrier's view of the leg centre; for the lesion producing the paralysis of the leg was entirely on the external aspect of the hemisphere. What weakens the argument a little in this case is that the leg recovered a good deal of power. It seems to me that Charcot and Pitres are scarcely warranted in supposing so limited an area to be the centre for the leg. They allow that in 1878 they did not know of one pure case of crural monoplegia, and that at the present time they are acquainted with but few. They give two only in their monograph; and although in each of these the paracentral lobule was involved in the disease, it was not the sole, nor even the principal, seat of the lesion in either. In the first case which they quote, the parts affected were the upper part of the ascending parietal convolution, part of the superior parietal lobule, the white matter beneath the ascending frontal, and a small portion of the paracentral lobule near the great median fissure. In the second case the disease involved the whole of the quadrate lobule and the paracentral lobule. Ferrier's view, which places the leg centre along the upper extremity of the ascending convolutions and adjacent parts on the internal aspect of the hemispheres, thus including the paracentral lobule, is more in accordance with our present experience. Charcot and Pitres have similarly compressed the centre for the arm within limits which seem to be narrower than we are justified in assuming from our present knowledge. They say that in 1877 they asserted that the middle third of the ascending frontal convolution was the centre for the arm, and, that in spite of much opposition to their view, they saw no need to alter it in 1878. Now they say that recent facts seem to prove that this centre is a little more extensive, and that lesions capable of producing brachial monoplegia may be situated even a little above the middle third of the ascending frontal. In Case 5 the lesion producing the paralysis of the arm involved the middle third of the ascending frontal convolution. In Case 6 the lesion was above the middle third; and in Case 2 it scarcely involved the ascending frontal at all, being mainly in the middle part of the ascending parietal. Now, on referring to Ferrier's plan, it will be found that these very three regions are said to contain centres for the opposite arm. The cases here related, therefore, support his view, and are opposed to the much narrower limits which Charcot and Pitres ascribe to the centre for the upper limb.

Although there may be slight differences of opinion as to the exact limitation of the cortical centres, recorded cases present a striking agreement with regard to the most important facts. The conclusions which appear to be warranted from our present experience are—

1. That there are cortical motor centres, and that they are situated in the two ascending central convolutions, and in the convolutions adjacent to them on the internal aspect of the hemispheres.

2. That the centres for the arm, leg, and face are more or less anatomically distinct.

3. That the centres for the lower part of the face and tongue are situated in the inferior extremity of the ascending frontal convolution, and that in most persons the posterior part of the inferior frontal convolution, and its junction with the ascending frontal in the left hemisphere, are specially connected with the faculty of speech.

4. That the centres for the arm are situated in the middle portion of both ascending convolutions, and that they extend into the upper third of these convolutions to a distance which is at present uncertain.

5. That the centres for the leg occupy the upper extremities of the two ascending convolutions and the parts continuous with them on the internal aspect of the hemispheres.

The question may be asked, What facts have you been able to collect which tend to disprove the view that the central convolutions contain the motor centres? During the period that I have had opportunities of making regular observations, I have not met with any cases of disease of these regions of the brain in which there were no motor disturbances during life, nor have I found uncomplicated lesions of other parts of the cerebral cortex which were accompanied by motor paralyses.

THE SURGICAL TREATMENT OF TUMOURS AND OTHER OBSCURE CONDITIONS OF THE BLADDER.

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(Continued from page 583.)

EXPLORATION of the bladder is warranted in all cases in which there is hæmaturia presumed to arise from the bladder, accompanied by pain and increased frequency of micturition, where no rational diagnosis can be formed by the more ordinary methods of examination. In such cases there is a reasonable probability that some new growth may be discovered. It is also called for in cases, equally inexplicable, in which hæmaturia is the only symptom. The beneficial result of opening the urethra under these circumstances is most strikingly shown in Case 9, in which there had been persistent and considerable hæmorrhage for three months before operation. Mr. F. Heath opened the membranous urethra and passed the finger through the prostatic portion, but it was found impossible to reach the bladder, owing to the stoutness of the patient and enlargement of the prostate; an indiarubber tube was passed into the bladder, and the urine allowed to drain away continuously. There was a slight trace of blood in the urine on the day following, but after that the hæmorrhage completely ceased. In this case the two conditions produced by the operation were: (1) some dilatation of the prostatic portion of the urethra; (2) a thoroughly empty and contracted state of the bladder. In this particular case there was some enlargement of the prostate, but it was not tender on pressure, and did not interfere with the emptying of the bladder. It seems most probable that the cause of the hæmorrhage was a varicose state of the vessels at the neck of the bladder, and that the success of the treatment was owing to the subsequent constant contraction of the bladder, the result of the operation.

There are cases in which pain connected with the bladder, and altogether unaffected by medical treatment, is the only symptom complained of. In Case 7 there was no pain at the end of the penis on passing water, but there was no stone or new growth in the bladder. As this symptom did not yield to medical treatment, the bladder was explored, but nothing was found; the patient had an attack of cystitis, from which he recovered. Three months after the operation the pain had disappeared and the patient had gained 14 lb. in weight.

The operations which have been performed of late for the removal of tumours from the male bladder are:—1. Lateral cystotomy, an operation identical in detail with lateral litho-

tomy; this was done by Humphry,[1] Berkeley Hill, Davies-Colley,[2] and Kocher,[3] and the patient recovered in three of the cases; the other was one of malignant disease. 2. Suprapubic cystotomy, by Liston[4] and Marcacci,[5] with recovery in the one and death in the other case. 3. A combination of these two in Billroth's notable case.[6] 4. A combination of perineal urethrotomy and suprapubic cystotomy, in Volkmann's case,[7] which ended fatally. 5. The more modern operation of median perineal urethrotomy by Thompson and by Whitehead, in a total of fourteen cases, with six recoveries and six deaths, whilst in one case very serious hæmaturia was cured, and in another the symptoms were relieved.

Successful cases have occurred by each method, yet there can be little doubt that median perineal urethrotomy is by far the least serious, and in fact may be looked upon as quite safe if the parts at the neck of the bladder be not torn in the manipulations required for the removal of the growths.

It is very difficult to formulate a short and expressive term for the operation; it is not a cystotomy, because the bladder is not, or should not be, *cut* into. Strictly it is simply perineal urethrotomy, but undertaken with a different purpose from that usually associated with the term. It is a median perineal urethrotomy, followed by some dilatation of the prostate with the forefinger.

The operation is performed as follows:—A grooved staff is passed along the urethra into the bladder, with the patient in the lithotomy position. The left forefinger is now placed in the rectum in contact with the apex of the prostate; by this means the rectum is protected and a guide for the direction of the incision obtained; the knife held in the right hand, with the cutting edge upwards, is now passed into the perineum exactly in the median line till its point lies in the groove of the staff just in front of the apex of the prostate; an opening into the urethra of just sufficient size to admit the tip of the forefinger is now made, and the external incision enlarged as the knife is withdrawn. A probe catheter is next passed along the groove in the staff into the bladder and the staff withdrawn; the forefinger well anointed with carbolic oil, or vaseline, is then insinuated into the urethra along the probe, and gradually pushed and rotated through the prostate into the bladder. With first the right and then the left forefinger in the bladder, whilst forcible suprapubic pressure is made with the other hand or by an assistant, the best possible examination of the interior of the bladder is effected. In cases complicated with stricture of the urethra this plan has to be modified. Instead of the staff, which it may be impossible to pass, a fine straight probe must be substituted and constitute the sole guide for the perineal incision. After the point of the probe has been cut down upon, it is thrust out of the wound and another director is passed backwards through the perineal opening into the bladder, and the operation completed in the usual way.

Pedunculated tumours may be removed by the forceps or écraseur, but in some cases in which this has been done it has been found necessary to use either the finger nail, or a sharp spoon, to scoop out the base of the growth. In broadly pedunculated or sessile growths removal by this means is impracticable, and in these cases the growth may be fearlessly, so far as hæmorrhage is concerned, torn away or removed piecemeal by the finger and forceps, or sharp spoon, for any bleeding that might be feared under such circumstances is easily controlled by the injection of undiluted solution of perchloride of iron into the bladder. This treatment has now been frequently employed with the best results as regards the hæmorrhage, and has not caused any untoward results; another proof of the power the bladder possesses of tolerating strong irritants.

After the operation we are in the habit of retaining in the bladder a soft elastic tube (Fig. 1), through which it can be thoroughly washed, and through which the urine can be continuously drained away into a vessel placed beneath the bed; this tube has generally been very easily borne and retained.

In females the examination is more easily accomplished by rapidly dilating the urethra by the successive introduction of œsophageal bougies, of consecutive sizes, constructed with tapering extremities, until the apex of the forefinger can be insinuated and gradually passed along into the bladder. It is interesting to note that in the only case of tumour removed in this way in which subsequent incontinence was met with, it is mentioned that the urethra was slowly dilated by a sponge tent.[8]

In two cases[9] Mr. A. T. Norton has removed the entire tumour, together with the portion of the base of the bladder from which it sprang. He made an incision through the urethro-vaginal septum, dissected the vagina from the bladder, and removed the growths with the scissors; the vesico-vaginal fistula, which was left, was subsequently closed by the ordinary method.

It has been considered a debatable question whether operation is advisable in malignant disease. As a means of permanent cure removal of the growth will certainly be unsuccessful, but as a palliative measure it is worthy of further trial. The danger in these cases would appear to be that of hæmorrhage; but it is an unrecognised fact that the tendency to bleeding is far greater from the superficial ulcerated surface of the growths than from their base; and on this fact is founded one great argument in favour of operation in these cases, for if only a portion be removed and the base from which the growth springs left, hæmorrhage is diminished. This beneficial result is unquestionably shown in Cases 5, 3, and 2, one in a female and the other two in males; in these cases the growths were removed by tearing and scraping, and, though the removal was not complete, it had the effect of lessening the hæmorrhage, which had previously been the most serious element of danger.

The following ten cases have come under our own immediate observation, and bear testimony to the value of digital exploration of the bladder, and the facility afterwards afforded by the operation for the removal of tumours from the bladder.

CLASS I.—WHERE A TUMOUR WAS FOUND AND REMOVED.

(A.) IN MALES—BY PERINEAL URETHROTOMY.

CASE 1. *Numerous small villous growths on trigone; removal by spoon; recovery.*—T. F——, aged seventy, a hard-working surgeon in a hilly and rural district, gives a history of an attack of acute cystitis nine years ago; since that time he has had irritability of the bladder and occasional hæmaturia during the last two years. On July 7th, 1882, he had some difficulty in micturition, and passed about half an ounce of clot, with considerable relief to his trouble. Since that date he frequently passed clots, and always blood, with the urine; at times the amount of blood in the urine would vary in quantity, but clots were always passed at the end of micturition. The symptoms continued the same, and towards the end of August, 1882, some shreds resembling the villi of a villous tumour were detected in the urine. Patient gradually became more and more exhausted, and indicated symptoms which warranted the gravest apprehensions. On Aug. 26th, Mr. Whitehead, with the sanction and assistance of Mr. Lund, opened the urethra on a staff, passed the finger through the prostate, and detected a number of small villous tumours situated on the trigone. These growths were principally detached by means of the finger nail; others were removed by a Volkmann's spoon opposed to the finger-end placed at the other side of the tumour. The hæmaturia ceased completely and at once after the operation. The following notes show the progress of the case:—Sept. 3rd: Pain and slight swelling in the left testicle.—28th: Perineal wound is quite healed. Urine is quite clear, and passed without difficulty by the natural passage. Takes solid food. Testicle less painful, and reduced in size.—Oct. 20th: Gets up at 7 A.M., and goes to bed at 10 P.M.—29th: Looks better than he has done for years. Rather more pain in the testicles, particularly the left.—Nov. 11th: Testicles much better. A good deal of mucus from the urethra.—25th: Is now attending to his practice.—Jan. 2nd: Passed No. 10 catheter without difficulty.—28th: Bladder irritable; frequent micturition; No. 12 bougie passed; urethra very sensitive.—Feb. 1st: Quite well, with the exception of some vesical irritability attributable to an enlarged prostate.—July 17th: Remains perfectly free from hæmaturia since the operation, and conducts his practice without any assistance.

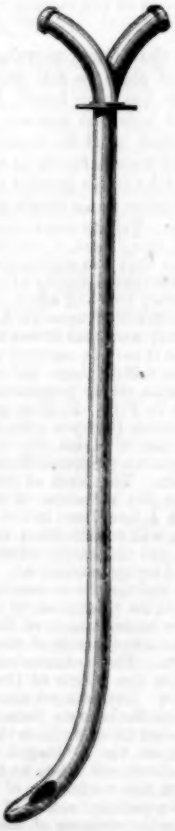
CASE 2. *Villous epithelioma behind pubes; removal by finger nail; temporary relief; death.*—J. H——, aged fifty-seven. On the 13th May, 1882, Mr. H——, on returning from a visit to a friend, who singularly was then dying from hæmaturia, observed, when in the urinal at the railway

[1] Med. Chir. Trans., 1879, vol. lxii.
[2] THE LANCET, Dec. 18th, 1880.
[3] Brit. and For. Med.-Chir. Rev., vol. lviii., July to Oct., 1876, p. 210; THE LANCET, Jan. 19th, 1877.
[4] Lond. Med. Times and Gaz., Aug. 2nd, 1862.
[5] Lond. Medical Record, May 15th, 1880.
[6] Brit. and For. Med.-Chir. Rev., 1876, p. 225.
[7] Arch. f. Klin. Chir., Bd. 9, p. 682.
[8] Boston Medical and Surgical Journal, August 25th, 1870, p. 120.
[9] Transactions of the Clinical Society, May 9th, 1879.

station, that he passed a stream of bright-red blood, attended with slight difficulty in micturition, but no pain. He had previously had some inconvenience in passing water, but had not suffered from any other symptoms. The hæmaturia ceased for four days after treatment, but then reappeared after a slight exertion. Trifling though constant hæmaturia continued till June 27th, when the bladder was explored with a sound, and a "something" was detected. After a short cessation the hæmorrhage became excessive, and the clots interfered so much with the micturition that the catheter was often required. Various styptics were tried, some as medicine and others injected into the bladder; Ruspini's styptic in large and frequent doses was the most effectual, though not permanently so. A weak solution of perchloride of iron was then used as injection, and by this means the hæmorrhage was completely stopped for a considerable time. In the early part of July the patient began to suffer from irritability of the bladder, as evidenced by frequent and painful micturition. On Oct. 6th the hæmaturia returned after an absence of three months; on the 11th Mr. Whitehead examined the patient with his medical attendant, Mr. Edwin A. Sutcliffe and Dr. Leech; on the 13th he explored the bladder through an incision in the perineum into the membranous portion of the urethra, and with the finger detected a growth just behind the pubes; this growth was papillated and situated on a hard flat base about the size of a florin; the papillated surface was easily removed by the finger nail, leaving a somewhat depressed area, with hard and elevated edges. There was no hæmorrhage during the operation. For the first four days after operation an ordinary lithotomy-tube was tied into the bladder through the perineal opening; on the fourth day a fresh tube was substituted; the urine flowed entirely through the tube, but it had occasionally to be freed from mucus, and at first from small pieces of the growth. On the 22nd of October—i.e., nine days after the operation, the bladder was irrigated by means of a (*Fig.* 2) double-current catheter introduced through the perineal opening, and the irrigation was continued through the subsequent course of the case night and morning. The lithotomy-tube was replaced by one of soft indiarubber (equal in size to a No. 12 English catheter), with a number of lateral holes to facilitate the discharge of mucus, which at this time was secreted in large quantities. At first a saturated solution of boracic acid was used to wash out the bladder, and later on a mixture of weak Condy's fluid and boracic acid, but no improvement resulted in the state of the bladder. The use of an injection of a solution of nitrate of silver of a gradually increasing strength (from 1 to 8 grains to the ounce) was, however, found very effectual in lessening the secretion of mucus; the urine nevertheless continued very offensive, and with the view of remedying this an injection of sulphate of quinine was substituted with apparent advantage for the boracic acid. There was no return of spontaneous hæmaturia after the operation, although blood was frequently noticed after introduction of the catheter for purposes of washing out the bladder. Beyond the cystitis the only local trouble that remained was the formation of an abscess near the perineal incision. Paroxysms of pain above the pubes and at the extremity of the penis were severe after the operation, and continued for three weeks; after that time they diminished, and by the early part of December the patient would be free from them for several hours together. On Dec. 12th the patient had a violent convulsion of a clonic character, and lay in a semi-conscious state; this passed off and left him in a state of irritable mania. Hyoscyamine administered hypodermically, in small doses, was found at this time most effectual in allaying pain and excitement. On Jan. 8th the patient became drowsy and disinclined for food, and on the 16th coma supervened and the patient died. Post-mortem examination of the urinary organs was not granted.

FIG. 1.

FIG. 2.



CASE 3. *Deep pelvis; digital exploration impossible; removal of growth with scraper; recovery.*—Mr. B——, aged sixty-three, a corpulent gentleman, weighing eighteen stone. In 1877 the patient was alarmed one day by noticing a blood stain on his shirt, but nothing further of this character arrested his attention till the month of August, when, after being at a race meeting, he passed a quantity of blood, the urine being first clear, then bright-red, and finally clear. After this he was confined to bed for ten days with this attack. Some time in the following year he was seen by Dr. Renaud, who is stated to have passed a catheter, which caused pain and bleeding. There is no material family history, and he himself had always enjoyed capital health. Mr. Whitehead first saw the patient in consultation with Mr. Sutcliffe on Nov. 1st, 1882, in consequence of a sharp attack of hæmaturia, apparently induced by hard shooting in a hilly district, with frequent walks of twenty miles a day; the bleeding was accompanied by pain, and confined to the end of micturition.—Nov. 14th, 1882: Patient is now passing large quantities of bright blood; the urine also contains pus, is alkaline and fetid. He has never noticed any shreds in the urine, and has not lost flesh. Ruspini's styptic checks the bleeding. On the 17th, an operation similar to that described in the former case was performed by Mr. Whitehead, and although the patient was thoroughly under the influence of an anæsthetic, the bladder entirely empty, and firm, vigorous pressure was made above the pubes, the finger could only just enter the bladder, and consequently a perfect exploration was impossible. Ring forceps carefully introduced and cautiously manipulated withdrew quantities of a substance resembling granulation tissue and produced profuse hæmorrhage. The masses removed had entangled in their substance quantities of earthy matter. Sims' uterine scraper, with flexible stem capable of being bent at any angle, was then gently applied to the surface of the bladder, and further quantities of tissue brought away. The bladder was washed out with tepid water and then injected with the strong solution of iron (1 part to 4 of warm water); for this purpose an elastic bottle was used, and the fluid was conveyed into the bladder through a catheter passed through a glass drainage-tube previously introduced into the bladder through the wound. The fluid was retained in the bladder two minutes, and then allowed to escape through the glass tube by withdrawing the catheter. The bladder was finally again washed out with tepid water, in order to remove as much of the iron and altered blood as possible. A large and unusually long lithotomy tube was required, and inserted into the bladder through the wound, and retained. 9 P.M.: During the day the patient had a fair amount of sleep, but was dis-

turbed about every half-hour by a scalding sensation down the penis, accompanied each time by a flow of urine down the tube, each paroxysm lasting about two minutes.—19th: Still troubled with scalding down the urethra about every hour, and lasting about two minutes. These attacks have not, however, interfered much with his sleep. The draw-sheets were stained with distinct areas of clear urine, blood-clot, and mucus.—20th: The patient is much better to-day, and considers that he is no worse than immediately previous to the operation. After this the patient found great benefit from drinking Bethesda water, and the washing out of the bladder twice daily with a solution of nitrate of silver (four grains to the ounce) —26th: The patient is enabled to walk out and enjoy himself, and only suffers from such hæmorrhage as may be reasonably attributed to the raw surface of a perineal sinus which still remains.—July 16th, 1883: The patient is convalescent and free from hæmorrhage, and able to go about much as usual.

(To be concluded.)

EMETICS FOR BONES IN THE THROAT.

BY JAMES GREY GLOVER, M.D. &c.

IT is curious that in several of the best text-books on surgery, among the means used for dislodging bodies in the throat, no mention is made of emetics. A few months ago I had to make the discovery of their value in the following circumstances.

On a Sunday morning, at about 10 o'clock, a gentleman asked me to see his wife, who the previous day, about 2 o'clock, in taking some soup, became conscious that she had swallowed a piece of mutton bone, which quickly went so far down that it could not be felt by a medical friend whom she saw shortly afterwards. When I saw her, about twenty hours after the occurrence, I was equally unable to feel the foreign body, but the distress of the lady left no doubt of the presence of something in the passage exceedingly disagreeable. Swallowing was only accomplished with the most painful effort and in the smallest quantities. I had, fortunately, no forceps with me, and the case was urgent. It occurred to me that if I could reverse the action of the stomach and œsophagus by an emetic, I might procure the object in view, and save the necessity for using instruments blindly. I always carry a drachm of sulphate of zinc in my purse. The difficulty was to get the patient to swallow with any satisfactory quantity of fluid. It was only by dint of great and painful effort on her part, at my urgent request, that she managed to take half a drachm in a fair amount of water. As she was not predisposed to sickness, and at the end of five minutes had no sensation of the sort, I gave her a second half drachm with more warm water. In a few minutes free vomiting began, and the first act of vomiting was followed by a chink in the vessel and the presence in it of a piece of mutton bone of the form and size represented below, and with four sharp edges and four (especially two) sharp points.

It can scarcely be doubted that a body of quadrilateral form, with such angles and edges, could only have been pushed downwards mechanically with serious injury to the walls of the œsophagus. Supposing it to have been placed horizontally or nearly so, as, from the difficulty of passage, would seem to have been the case, its seizure and removal by forceps would have been scarcely less hazardous. Nothing, on the other hand, could have been more happy than the effect of the emetic. A trifling soreness for a day or two was the only unpleasant consequence of the twenty hours' impaction.

Shortly after this case I had two others of fishbone in the throat. These were both small, and in neither could the bone be felt with a short index finger. In both I had recourse to an emetic with prompt and effectual relief.

I have since found that emetics have been recommended by various authorities in these circumstances. An instance of the use of one and a quarter milligramme of apomorphia hypodermically, followed closely by a second dose, in a child aged ten, and in whom not even water could pass the obstruction caused by a plum-stone in the œsophagus, is quoted at page 504 of the *Medical Times and Gazette* for Oct. 26th, 1878. In less than two minutes free vomiting and the expulsion of the stone followed. Irresistible sleep also followed, which was overcome by strong coffee. Apomorphia may be safely used hypodermically in case of adults where other emetics cannot be swallowed; but the sulphate of zinc with water will generally answer where emetics are indicated. The more water the better and safer is their action likely to be.

Highbury.

ON THE TREATMENT OF MEASLES.

BY D. MACLEAN, M.D. GLAS.,
PHYSICIAN TO THE GLASGOW PUBLIC DISPENSARY, CHEST AND THROAT CLINIQUE.

IN the present prevalence of this disease it may not be out of place to call attention to a method of treatment which has been found, in my hands, of what might be called universal success. Considering that this disease is one that must be passed through by almost all members of the human family at some period of their existence, we may take it for granted that it is something essential that the human frame should undergo for the purpose of perfect health. Taking also for granted that it is the cause of cutting short many lives, it behoves us to take advantage of every means that can abbreviate the duration of the disease and diminish the mortality which so unhappily springs from it. We see every now and again in the journals and newspapers that an epidemic of measles has taken place in such and such a quarter, and that it was necessary to close the schools, &c. Nor is it only in our own country that we learn of so many deaths taking place, but we read of how its fearful ravages decimate whole populations, such as have recently taken place in Fiji. It thus seems essential that any form of treatment (for we cannot apparently prevent the onset) that can diminish the mortality must be of paramount importance whenever these epidemic or even sporadic cases appear. The form of treatment which I propose to lay before the members of our profession, and the remedies which I have been in the habit of using for a good many years, will enable them to try the same in their own practices, and ultimately refute or corroborate the conclusions I have long ago arrived at.

As this disease is considered one of the zymotic class, we have in its treatment, to consider, principally two things—(1) the management of the ferment, or whatever it is; and (2) the management of the effects of this ferment upon the system. The most marked of these latter present themselves to us in the effects of the ailment upon the mucous membranes. The greatest action of the disease, as we all know, is upon the mucous membrane of the lungs, and it is from its action there we have the immediate cause of the ensuing death, or the prolonged ill-health afterwards. We have thus clearly set before us the line of action to follow:—(1) To relieve the congestion of the mucous membrane, which is the immediate cause of danger; and (2) to destroy or reduce the violence of the disease itself. This I have been in the habit of doing, I believe successfully, by giving (say to a child of two or three years of age) a teaspoonful in water of the following mixture every three hours:—Ipecacuanha wine, half a drachm; syrup of squills, half an ounce; quinine, two grains; acetate of ammonia solution to two ounces. Of course the quinine is increased according to age. We have thus in this mixture a stimulating expectorant and diaphoretic to relieve the tension in the mucous membranes and the skin, and also in the quinine a specific to destroy or abate the violence of the primary ferment. It may be necessary to add to or modify the form in which this plan of treatment is carried out; as when the irritation and cough are persistently great, then the addition of a little tincture of hyoscyamus is all that is necessary. So with the quinine; sometimes the stomach is so irritable that it is necessary to omit it from the mixture; but as it is essential that it be introduced into the system for the destruction of the ferment, it can be administered separately by giving it in powder, mixed with saccharated carbonate of iron, which

diminishes the irritant action of the quinine that takes place when the drug is given alone.

This form of treatment for measles is good in all types of the disease, whether the attack be mild or severe, and more especially valuable when we have that dangerous form in which the eruption is of a deep-purplish colour, a form which is generally recognised as being the most fatal. This style of treatment I have followed for a number of years. I have seen many cases, and, as a justification for submitting it to the notice of the profession, I do not remember having signed a certificate of death for either the disease itself or its effects.

Glasgow.

ON A CASE OF

CYSTIC POLYPUS OF THE RECTUM, COMPLICATING PARTURITION.

BY P. ENGLEDUE PRIDEAUX, M.R.C.P. LOND., &c.

MRS. H——, the wife of a tradesman, aged twenty-eight, was delivered of her first child on May 12th, 1881. The labour was long and tedious; the first stage was very prolonged, the os dilating very slowly. Then the head was arrested in the pelvis, and, in spite of very violent pains, made no progress. I could discover nothing to account for this; the pelvis seemed well formed and of good development. After waiting for some time, in deference to the patient's wish, and finding the pains ceasing, I applied Barnes' long forceps, and after using some force, delivered her of a male child, which appeared to have been dead some days. The perineum was ruptured; I placed a deep stitch in it, and it healed completely in a few days. The patient progressed very well, and was convalescent in the ordinary time.

The second labour took place on April 27th, 1882. The first stage was very long, lasting over two days, accompanied by a persistent dragging pain on the left side of the body, which seemed to be from one spot. I noticed that the rectum seemed full high up, and thinking it was caused by fæces, ordered an injection, which however brought away nothing. The labour progressed very slowly, and the patient complained of this intense pain, which seemed as much as she could bear, and was evidently quite different from the labour pains themselves. Finding that she was becoming exhausted, and the head did not advance in the least, and seemed arrested high up, I introduced Barnes' long forceps, and for a long time was unable to make any impression with these; at last, after continuous and firm traction, the head seemed to slip past very suddenly, coming out through the external orifice before I expected it, causing extensive rupture of the perineum right through into the anus. The rest of the labour was easily accomplished, the child, a fine girl, being born alive. I put in several deep wire sutures in a manner I always have found successful; bandaged the patient and left her fairly comfortable, but still complaining of pain in the side, for which I gave her a dose of opium. At night I found the abdomen distended apparently with flatus. I ordered a draught of morphia and a hot bran poultice. The next morning the abdomen was more distended, but no excessive tenderness; still complaining of acute pains from one spot. Temperature normal. The abdomen went on distending all this day, and seemed full of gas, little or none being passed. There was no tenderness over the general surface. Temperature at night 99·5°. There was slight sickness in the night, otherwise food had been taken very well; gave some morphia and bismuth. On the morning of the third day the abdomen was swollen and tense, like an immense drum, evidently enormously distended with flatus; no pain; temperature 99·5°; pulse good, but somewhat quickened and varying. She looked well and cheerful. I made an examination, and found in the rectum a large swelling about the size of a fœtal head, freely movable, and which I thought at first to be intussuscepted bowel coming down. I was the more confirmed in this as I thought I detected a central opening. After spending a long time in trying to reduce this by gentle manipulation, I sent for, and obtained the advice of, Mr. Wm. Liddon of Taunton. He made a careful examination, and came to a conclusion similar to mine. We found, however, that we were unable to pass a catheter up what appeared to us to be the central opening, whilst we found we could pass a long tube up between the tumour and the rectum; this let off a quantity of gas, and materially relieved the patient. As the case was so obscure, we determined upon reopening the perineal wound, and enlarging it up the recto-vaginal septum, thus exposing the tumour to view, the patient being placed in the lithotomy position. We at once saw that it was not covered with mucous membrane; its surface was rough, and much injected. The part we had taken for an opening was a dimple with a small appendix to the tumour. We then dragged it down, and found it to be a cyst as large as a fœtal head, with a long narrow pedicle, reaching far out of reach up the bowel; we could make out at least six inches; we then tied it in two places, cut it off with scissors, and allowed the rest of the pedicle to remain. The tumour when opened contained about half a pint of a thick albuminous fluid, with one part a little thicker than the rest; its wall was found one-eighth to a quarter of an inch thick, much bruised and ecchymosed in parts, probably from the delivery by the forceps. After removing the tumour the abdomen soon went down, with great relief to the patient. The rent was carefully stitched with deep and superficial sutures, and a morphia suppository was inserted. The further progress of the case was satisfactory, and would have been more so but for an intractable diarrhœa which set in soon after the removal of the tumour. It appeared to me that the tumour had acted as a chronic obstruction to the bowel, and its removal, combined with the bruising of the bowel by the forcible delivery, were the causes of this diarrhœa. I found that with aromatic powdered chalk and subcarbonate of bismuth frequently administered, together with morphia suppositories, I just managed to keep in check this diarrhœa, but it unfortunately retarded the healing of the wound in the recto-vaginal septum, and ultimately a small opening was left. By frequently touching the edges of this with acetum lyttæ it has, however, so contracted that it has not proved a source of annoyance to the patient. With regard to the rest of the details, the progress of the case was everything that could be desired, the patient never had a bad symptom, the temperature never rose above normal, there never was any tenderness over the abdomen, and the dragging pain ceased, and the convalescence of the patient became established in a time very little longer than after ordinary parturition.

The case is an exceedingly rare one, there being but one or two recorded cases, and the length of the pedicle making it quite unique. I am of opinion that the tumour existed during the first labour, and grew in size from the bruising inflicted on it by the delivery, and that it lay usually in a bend of the colon, but was pushed down in the second delivery by the descending child, and then blocked the bowel completely, like a blown-out Barnes' bag. There had been for some years trouble with the bowels, in the shape of constipation, but nothing to excite suspicion of any tumour.

Wellington, Somerset.

ON A CASE OF

SPINA BIFIDA MASKED BY A FATTY TUMOUR.

BY ARTHUR JEFFERSON, M.R.C.S.,
HOUSE-SURGEON, YORK COUNTY HOSPITAL.

MARTHA M——, aged four, was admitted to the hospital under the care of Mr. Jalland in October, 1882. Her mother stated that from birth the child had had a tumour on her back, which lately had become larger, and commenced to give rise to a certain amount of pain, and that also there had always been more or less incontinence both of urine and fæces. On examination the patient presented on her left buttock a largish tumour, which gave to the gluteal region a unilateral Hottentot conformation. The tumour had no apparent boundary, but gradually shaded off into the trunk and leg on the same side; on firm pressure no diminution in its bulk occurred; on gentler manipulation it gave to the fingers a semi-fluctuating sensation. The upright position caused no apparent increase in the tenseness of the enlargement, but in the erect posture the unilateral nature of the tumour, so very distinct in the prone position, was somewhat modified, and it became apparent that the vertebral

column ran beneath the swelling, about one-quarter of which was to the left of the spine, the remaining three-quarters to the right. For about ten days the child was watched, and it was found that there was persistent incontinence of urine and occasional incontinence of fæces. It was now decided to explore the tumour with a trocar and cannula. This was accordingly done under the spray, the puncture being made to the left of the swelling, over the spine; but though many different-sized trocars were used still no fluid came away. In order to explore further an incision was now made vertically down the swelling, and carried through the fat to a depth of about two inches. On the sides of this incision was seen a stratum of vascular connective tissue which divided the fat into two layers, a superficial, thin, normal layer and a deeper abnormal one. These two layers were now separated from one another; but no lateral limits to the new fat being found, it was resolved not to enlarge the primary incision, but simply to remove through it as much of the fatty growth as could be got at. While dividing the deep attachments a cyst was suddenly punctured, and about half an ounce of clear fluid gushed out. The wound was now sewed up and a ganze dressing applied. After the operation the child suffered no pain; on the third day, the bandages having become moistened by urine, the wound was dressed. There was no pus, and it looked healthy; it was impossible to say whether any serous oozing had occurred, the dressings being so wetted by urine. On the night of this day the child, who previously had had no bad symptom, vomited once, her temperature being, as on all previous nights, a little over 98° F. On the following morning, fourth day after the operation, it was reported that the patient had been unable to keep anything down, her temperature was 96°, her body felt very cold, her pulse was feeble and slow, and she seemed very listless. These symptoms appeared to point to carbolic poisoning; the urine, however, could not be taken as a guide, being passed into a mackintosh in contact with the carbolised dressings. Eucalyptol dressings were applied, and stimulants with digitalis administered. In the evening the child's condition was more serious; she was quite conscious, but more listless. The vomiting now occurred about every ten minutes, quite irrespective of the taking of food. The surface of the body was peculiarly cold, the temperature still being 96°, and the radial pulse could not be felt. On stethoscopic examination the heart's action was found to be very feeble, the pulsations being much increased and varying in rapidity, with occasional intermissions. It was now evident that the vomiting and other symptoms had some cerebral cause. The child was wrapped in blankets, hot water bottles were applied, and enemata of brandy and digitalis administered at frequent short intervals. The symptoms continued, and ended the following morning in a convulsion, during which the patient died.

Post-mortem examination.—On forcing apart the edges of the incision, which had partly united, the opening into the cyst was seen; a director being passed through this the cyst was opened up. The cavity thus exposed was about the size of a pigeon's egg, smooth and glistening on its inner surface, bounded above by the laminæ and spinous process of the first sacral vertebra, coming out from beneath which was the termination of the spinal cord, which, passing downwards and backwards, was attached to the cyst-wall, the spinal cord, parietal layer of arachnoid, dura mater, and fat being at this point fused into one mass. There was no cerebro-spinal fluid even on placing the body erect. On opening the skull, the sinuses and veins of the brain were found to be enormously engorged with blood, the ventricles were destitute of fluid, and the choroid plexuses much distended. Save some pulmonary congestion, the other organs of the body were apparently healthy.

Remarks.—In this case there was no internal hydrocephalus, the cerebro-spinal foramen being patent, therefore an opening into the spinal canal having been made, the cerebro-spinal fluid was naturally drained off, and its re-accumulation prevented. In consequence of the constant drawing off of this cerebro-spinal fluid the vessels of the brain, being no longer subjected to their normal pressure, with more or less rapidity dilated; it may be supposed that this dilatation increased gradually, step by step, until the third day, when the brain became so much engorged as to fall and press with more or less force on its base, on which the unsupported cord would also drag heavily. The resultant of these two forces—the weight of the brain and the drag of the cord—would pass downwards and forwards through the medulla oblongata, which would be pressed on to the basilar process of the occipital bone, the fourth ventricle being flattened out on the top of it. As a consequence of this, the various nuclei in the floor of the fourth ventricle became irritated; the first of these centres roused to activity would seem to have been the vomiting centre; next the vaso-motor and cardio-inhibitory centres, producing on the one hand pallor and coldness of the surface, in which the cerebro-spinal congestion would assist, and, on the other hand, weakness and irregularity of the heart's beat; finally, just before death, the respiratory centre was also involved and the asphyxial convulsion occurred which terminated life. This case illustrates some of the consequences of the withdrawal of the cerebro-spinal fluid. It is possible that had the child been placed face downwards, with its buttocks elevated, its life might have been prolonged.

York.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

OLD HIP DISEASE; EXCISION; HEAD CARIOUS; NO NECROSIS; NO SINUS; PERFORATION (?) OF ACETABULUM; RECOVERY WITH USEFUL LIMB.

(Under the care of Mr. T. BRYANT.)

FOR the report of the following case we are indebted to Mr. Kendall:—

Henry D——, aged seven, was admitted on March 28th, 1881, into Job ward. His mother died of phthisis, his father was living and healthy. A brother had been in hospital for hip-joint disease. The patient was a weakly looking child, and in 1878 he fell down and hurt his hip. Soon after he began to limp and complain of pain in his hip. An abscess formed at the inner side of the lower third of the femur. This was opened, and after discharging for a time, it closed in about a month. It began, however, to discharge again in March, 1880. Another abscess formed on the outer side and upper part of the femur, and burst. In April, 1880, he was admitted under Mr. Bryant's care. The leg was then abducted, and there was 1¼th of an inch shortening. He did not complain of much pain, and could bear a considerable amount of manipulation except rotation of femur. Slight grating was felt. The pelvis moved with the femur, and the movement at the hip-joint was very limited. The tensor vaginæ femoris muscle was subcutaneously divided, and with a little force the limb was reduced to its proper position. A double splint was put on and extension applied. This was changed for a Thomas's splint, and the boy was discharged in June, 1880. He continued to wear this splint up to the middle of March, 1881, or within a fortnight of readmission.

On admission there were two abscesses, one on the outer part of the thigh at the upper part, which had burst, and from which two small pieces of bone had come away. The second abscess was on the inner and upper part of the thigh. The boy had been able to walk about on the splint without crutches. As he lay in bed the back formed a very distinct arch, which disappeared when his leg was flexed to about 45°. When the leg was so flexed the anterior superior iliac spines were level, and measurement gave 1⅜th in. shortening of the diseased limb.

March 31st.—Urine, sp. gr. 1030, acid; no albumen or sugar.

April 1st.—Abscess on inner side of thigh opened and some hard caseous matter evacuated. When washed out part of the fluid came out of other opening. A small piece of terebene lint was introduced.—9th: Thomas's splint applied.—29th: Splint changed for a double Thomas's under anæsthetic mixture of alcohol, chloroform, and ether. Great trouble was experienced in bringing the leg into position, as it was badly abducted and rotated inwards.

May 17th.—Under the anæsthetic mixture the finger was

introduced into the abscess on the inner side of the thigh and discovered a space (all the tissues being undermined) leading into a cavity in the adductor muscles. From the outer side the finger went down and round the neck, which was found bare. There appearing to be good movement in the joint at this stage, it was thought that free openings would enable the part to recover, but upon trying to account for the shortening, it was found that the bone was displaced upwards on to the dorsum ilii. The opening over the great trochanter was enlarged, and having peeled off the periosteum the bone was sawed through just below the trochanter, and what was remaining of the neck was removed. Several small pieces of the articular surface of the acetabulum were removed. A hole was found in the acetabulum, through which it was thought the fascia on the inner side could be felt. This opening seemed about the size of a threepenny piece. The wound was dressed with terebene lint, and a double splint put on. Morphia injection (one-sixth of a grain) was ordered every night. None of the head proper was left; there was only the stump of a neck, and this was much reduced in all directions. The bone was dense and yellow except just near the trochanter, where a little healthy bone remained. The head proper was not found.

June 10th.—No discharge from the wound.—23rd: Nearly well; the splint removed, and the boy able to sit up in bed.

July 5th.—The patient complains of pain at the inner part of the thigh, near Poupart's ligament, where there is a good deal of swelling, but no fluctuation can be felt.—8th: The swelling has increased a good deal, and there is a good deal of inflammation about the part; temperature 100·2°.—9th: The abscess opened; a large amount of pus evacuated; double splint applied.

Sept. 7th.—The wounds discharging still; the splints removed, and the leg put up in sand bags.—10th: The splint reapplied.

Oct. 26th.—Doing very well; the drainage-tubes being gradually shortened.

Nov. 22nd.—The last drainage-tube removed.—28th: The leg has very fair movement of abduction and adduction, and flexion and extension.

Dec. 13.—The patient got up, and was able to walk with a little assistance and his crutches.—17th: Able to get along with his crutches without help.

The temperature ranged for the most part from 99·4° to 100°; on the day of operation it was 101·6° in the morning, and 103·2° in the evening. It fell next day to 99·2°, and did not afterwards rise above 100°, except on July 6th, when it went up to 103·8°, but fell again on the following day to 100·2°.

Jan. 20th, 1882.—The boy has every movement of the limb, and can bear the weight of his body on it; still to use crutches.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL, WOLVERHAMPTON.

CASE OF RUPTURED SPLEEN; DEATH ON THE SEVENTH DAY; NECROPSY.

(Under the care of Mr. VINCENT JACKSON.)

FOR the following notes we are indebted to Mr. J. W. Batterham, M.B., B.S. Lond., house-surgeon.

Two days previous to admission J. H——, aged forty, was at his work unloading a barge, when the mast fell and struck him on the left side.

On admission, July 25th, 1883, the patient looked pale, had a very feeble pulse, and complained of pain in the left hypochrondium on deep inspiration. There was slight bruising over the ninth and tenth ribs, but no fracture, tenderness, or distension of abdomen. The patient was kept in bed on milk diet, and ordered four ounces of brandy daily. Evening temperature 99·8°. — 26th: The general condition had improved, pain in side was less, and the feeling of faintness had passed away. Temperature 97·8°.—28th: Early this morning, on sitting up in bed the patient became extremely faint, and remained so the greater part of the day, but improved towards evening. Complained of pain at the seat of injury. There was slight abdominal tenderness.—29th: The patient had another attack of syncope. Abdomen very painful and distended; some dulness on percussion in the flanks. Ordered one grain of opium pill every four hours; glycerine and belladonna to abdomen.—30th: Patient lies on his back with knees drawn up; skin cold and clammy; features pinched and pallid; pulse scarcely perceptible. Respiration rapid and entirely thoracic. Temperature 98°. Patient died about 1.30 P.M.

Necropsy, twenty-six hours after death.—Rigor mortis well marked; body well nourished; slight ecchymosis over the left hypochondriac and lumbar regions; abdomen much distended; tympanitic round umbilicus and dull in flanks. On opening the abdomen several pints of dark-blood fluid escaped and large blood-clots were observed. Surrounding the anterior edge of the liver, on further examination, large clots were found enveloping chiefly the liver and spleen. On removing the viscera, all were found to be extremely anæmic, but otherwise healthy. The spleen was of normal size and consistence, on its convex surface appeared four or five transverse ruptures, varying in length from one inch and a half to four inches; depending from these were several large clots. At the upper extremity of the organ a large clot was found between it and its capsule. No evidence of peritonitis. Thorax, pericardium, and heart healthy. Extensive pleuritic adhesions were found on the right side; the left pleuritic cavity contained several ounces (fifteen to twenty) of serous fluid. On removing the lungs both lower lobes were found to be collapsed and airless (sank in water). Brain not examined.

CHRISTCHURCH HOSPITAL, NEW ZEALAND.

MULTIPLE LYMPHADENOMA; ENLARGEMENT OF SUBMAXILLARY, CERVICAL, AXILLARY, BRACHIAL, INGUINAL, AND BRONCHIAL GLANDS ON BOTH SIDES; TREATMENT BY ARSENIC; RECOVERY.

(Under the care of Dr. BAKEWELL.)

D. Mc. N——, aged forty-three, an Irishman, a contractor. No family history of any tumour. Personal history: Had "fever" thirty years ago; has been a hard drinker at times, but not systematically; has never had syphilis or gonorrhœa; has always been a healthy man until this illness commenced. Present state: Is very deaf; is a florid-complexioned man, with very great congestion of the face and head; looks robust and healthy in other respects; about 5 ft. 10 in. high, and muscular; voice rather squeaky. Showed first a tumour a little above the bend of the right elbow, which looks like a moderate-sized cocoanut (without the external husk), with the skin tensely stretched over it. It is situated along the inner side of, and partially overlapping the, biceps. It was not measured at first, but a week after the specific treatment was commenced it measured seven inches in length, and the circumference of the arm, including the tumour, was 13½ inches. The glands in the cervical regions of both sides are enormously enlarged; a tape carried over the seventh cervical vertebra and along the upper edge of the clavicles measured twenty inches at date of first measurement. The submental and submaxillary glands partake of the enlargement. The axillary glands on the right side are all enormously swollen; one of them is the size of a very large orange, and hangs pendulously from the other masses. The left axillary glands are enlarged, but not extensively. The inguinal glands are also enlarged, but not nearly to such an extent as the axillary. There is no enlargement in the popliteal regions. The skin over the tumour in the right arm is dark-purple, tense, and shining. Percussion showed absolute dulness on both sides between scapulæ and the spine posteriorly, with coarse expiratory murmur, and in some parts tubular breathing. The breathing when asleep is extremely stertorous, and when awake is husky. Says his voice has altered within the last week or two. In other respects is quite well.—History of illness: Fifteen months ago a swelling was first noticed at the bend of the right elbow, which has constantly increased since. Afterwards the glands in the neck began to swell. Has only been deaf for four days. Has had no medical treatment, but has been under some herbalist, without deriving any benefit. The blood examined microscopically showed an increase of white corpuscles, remarkable for a ruddy complexioned healthy man, but not more than is found in many cases of ordinary anæmia. There is no hæmatocytometer at the hospital, so that the number could not be estimated. The patient was admitted on March 22nd, 1883. The following mixture was prescribed, to be taken three times a day, five grains of iodide of potassium, twenty-five minims of liquid cinchona.—24th: The iodide has had no effect, as the tumours are all evidently increasing, especially on the right side of the neck. The rapid development of the tumours, and the

increased dyspnœa, made it necessary to arrange that the resident surgeon should perform tracheotomy at any time if urgent symptoms should require it. To take five minims of the solution of arsenic three times a day.—26th: Arsenic begins to purge. Bowels open three times this morning; no other discomfort from it. Tumours still increasing. Compound chalk and opium powder, as circumstances require.—27th: The patient himself called attention to the fact that the tumours about the neck seemed softer.—31st: Tumours decidedly softer; no apparent diminution in size. The arrest of the increase, and the softening of the tumours, gave rise to hopes that they might become absorbed, and accordingly the measurements as given above were made for the sake of comparison.

April 7th: The measurements are exactly the same. The nurse says that he sleeps now without making the "whistling" noise. He says that he can feel the right angle of the lower jaw, which he could not do when he came in.—11th: The tumours are evidently softer. He feels better. No cough.—13th: Purged occasionally.—16th: Measurement round the right arm 12⅝ in. (gain of ⅛ in.); in length 6½ in. (gain of ½ in.); round the root of the neck, as above described, 18⅞ in. (gain of 1¼ in.). Hearing much better.—28th: Measurement round the tumour of the arm 11⅝ in.; round the neck 18¼ in. From this time onwards there was steady uninterrupted improvement. The tumours all diminished in size; the deafness entirely disappeared; the face lost its congested look, and he was discharged to be an out-patient. On June 1st he presented himself. The tumour in the arm is barely perceptible; those in the axilla have entirely disappeared; the submaxillary glands are much diminished; and the cervical fast disappearing. He says he had epitaxis every day for a week. He has taken the arsenic regularly three times a day.—25th: Came again. All the glands (including the bronchial) are perfectly healthy with the exception of one cervical gland, which is about the size of an almond. Percussion in the chest normal, and respiratory murmurs normal. The man looks altogether different, the face having entirely lost its congested and swollen state. To take the solution of arsenic once a day for a month.

Remarks by Dr. BAKEWELL.—A more hopeless-looking case than this on its first admission I never saw. For the first few days death from pressure on the larynx seemed imminent; besides which there was pressure on the bronchi within the chest. I obtained the idea of using arsenic from an old volume of the Sydenham Society's Biennial Retrospect (1871–72, p. 244), which gives a brief account of a case of exactly the same kind, treated by Billroth, with recovery. My colleagues felt very incredulous as to any benefit that would occur from the treatment, and I confess I cannot in any way explain the *modus operandi* of arsenic; but Billroth's case and this one are at any rate enough to encourage its further use in these very intractable and severe cases of multiple lymphadenoma. The only inconvenience from the arsenic was that it purged a good deal at first. There was no nausea or vomiting. A few doses of the compound chalk and opium powder sufficed to check the purging until tolerance was established.

I might mention that an exploring needle was passed into the large tumour on the right arm, and the fluid was examined microscopically. I found nothing but round cells, in every respect resembling leucocytes. This was before the arsenic was given.

Reviews and Notices of Books.

Inquiries into Human Faculty and its Development. By FRANCIS GALTON, F.R.S. Pp. 380, with Plates. London: Macmillan and Co. 1883.

THIS is one of the most interesting books we have read for some time, for it treats of various forms of human faculty, which Mr. Galton may almost claim the merit of discovering, or at least of bringing into general notice. Some of the chapters are familiar enough to the readers of *Nature*, and others have been delivered in the form of lectures or addresses; but we think the author has done well to gather them in one volume, and thus enable his observations to be read and studied together. The most valuable additions to our knowledge of psychical processes are those bearing on the subject of "mental imagery," which will break new ground for many of our readers. Mr. Galton, having noticed occasional statements and anecdotes in the public prints of persons whose visual memory is so clear and sharp as to present mental pictures that may be scrutinised with almost as much ease and prolonged attention as if they were real objects, determined to make systematic inquiry into the subject, and accordingly forwarded to some of the principal scientific men with whom he was acquainted a circular asking whether they were familiar with such vivid representations of scenes and events that were merely called up in the memory. The replies for the most part were negative, but, undeterred by this, he continued his investigations among the general public, and then found that a certain number of persons have an extraordinary power of visualising objects that they have seen, or of calling up mental imagery which corresponds to word-symbols with great vividness; others have it to only a moderate extent; whilst in probably the great majority it is absent, perhaps failing for want of use, as it seems to be pretty common in childhood.

The first group of questions circulated by Mr. Galton was thus worded:—"Before addressing yourself to any of the questions on the opposite page, think of some definite object—suppose it is your breakfast-table, as you sat down to it this morning,—and consider carefully the picture that rises before your mind's eye. (1) Illumination: Is the image dim, or fairly clear? Is its brightness comparable to that of the actual scene? (2) Definition: Are all the objects pretty well defined at the same time, or is the place of sharpest definition at any one moment more contracted than it is in a real scene? (3) Colouring: Are the colours of the china, of the toast, bread-crust, mustard, meat, parsley, or whatever may have been on the table, quite distinct and natural?"

We cannot of course quote the answers of his various correspondents, who appear to have been numerous; but we may give one of each of the three groups into which he has cast them, to show how great is the variation that exists in different individuals. One of the cases in which the faculty of developing mental imagery is very high, replies, "I can see my breakfast-table, or any equally familiar thing, with my mind's eye, quite as well in all particulars as I can do if the reality is before me." A second correspondent, in whom the faculty is mediocre, writes, "I can recall any single object, or group of objects, but not the whole table at once. The things recalled are generally clearly defined. Our table is a long one; I can in my mind pass my eyes all down the table, and see the different things distinctly, but not the whole table at once." Lastly, a correspondent in whom the faculty is low, replies, "It is only a figure of speech that I can describe my recollection of a scene as a 'mental image,' which I can 'see' with my 'mind's eye.' The memory possesses it, and the mind can at will roam over the whole, or study minutely any part." It will thus be seen that the greatest variations exist, and we have no doubt that in many instances good painters, musicians, and actors owe some of their pre-eminence to the vividness with which past scenes and events are reproduced before their mental eye. Mr. Galton remarks that one statesman has assured him that a certain hesitation in utterance which he has at times is due to his being plagued by the image of his manuscript speech, with its original erasures and corrections. He cannot lay the ghost, and he puzzles in trying to decipher it.

Not less interesting are Mr. Galton's observations in regard to number forms, for it appears that a certain proportion of individuals—roughly speaking, one out of every thirty adult males, and one out of every fifteen adult females—visualise numbers, and many of them in a very extraordinary way. The numbers often assume certain positions, and certain numbers come into prominence, so that a kind of framework appears on the visual field when

the eyes are closed. This framework differs in different people, sometimes being like the steps of a ladder, sometimes like a clock-face, sometimes in squares, or in an arrangement like a thermometer index, drawings of which are introduced into the text, and may be compared with advantage.

Other chapters deal with the occasional association of colour with letters and with sound. The chapter on Psychometric Experiments, on the History of Twins, and on Composite Portraiture, to which Mr. Galton is well known to have paid great attention, are well worth reading, and we can cordially recommend the book as in the highest degree amusing and suggestive.

The Diseases of Women. By Dr. GRAILY HEWITT. Fourth Edition. London: Longmans and Co. 1882.

"THE mechanical system of uterine pathology" is the idea which runs through the whole of this book, from first to last—so much so, that to state the number of pages occupied by the study of displacements of the uterus is impossible; indeed, there are very few of the diseases of women which do not seem to be due to them, and they would appear to be the key to almost every female ailment. Now, this system is based on the hypothesis that the uterus is normally in a "normal" position and of a normal shape, and that deviations from this position and shape entail consequences of a length, importance, and sameness inconceivable. Here are some of them:—Pain in the region of the uterus, or near it: (1) Spontaneous; (2) produced by motion (uterine dyskinesia); (3) undue sensitiveness to the touch; (4) leucorrhœa, dysmenorrhœa, menorrhagia, amenorrhœa. If married, sterility, abortions. Various reflex phenomena: (1) Sickness or nausea; (2) hysteria; (3) convulsions (!); (4) cephalalgia; (5) melancholia. Disturbance of functions of the bladder, disturbance of the functions of the rectum, disturbance of the sexual functions (dyspareunia). Such symptoms, or most of them, are repeated for very various conditions with a persistence reminding us of the "cornet, flute, harp, sackbut," &c. &c.

Unfortunately this system preceded the data which should have preceded it, and which have been furnished by Vedeler and Herman. According to Vedeler (who examined 3012 women, and whose results are practically the same as those of Herman), only 15 per cent. of all women had the so-called "normal" position; forward displacements occurred in 63 per cent., and backward displacements in 18 per cent., while in 75 per cent. of all healthy multiparous women the uterus was anteverted or anteflexed. Again, with regard to dysmenorrhœa, 252 women were examined who had no genital symptoms at all; of these 59 were virgins, in 47 of whom there were flexions. Other details will be found in this journal for August 18th, 1883, p. 286; Vedeler's conclusion being that flexion of the uterus has no effect whatever on dysmenorrhœa. These results, which have been practically confirmed, reduce the mechanical system to the condition of an inverted pyramid, or to that of the image seen by the monarch in his dream, the head of which was of gold, the breast of silver (significant apposition of metals), but which was smitten on the feet by a stone, and crumbled away, while the stone became a great mountain, and filled the whole earth. But although this is the history of the present state of our knowledge, it is not to be expected that the stone will at once fill the whole earth; on the contrary, we expect that the mechanical system will survive in many parts for some time, as we still may see the light of a star whose existence has been quenched many years back. But, leaving metaphors, the present work *is* in fact the applied mechanical system of uterine pathology, and stands or falls by it.

The illustrations are almost all diagrams, and represent distortions, accompanied by narrowing of the seat of distortion, distension of the cavity above, and, in short, all the conditions which are constantly described, but which the entreaties of sceptics have hitherto utterly failed in producing in the flesh at the Societies for their information. They therefore serve as illustrations of theories, but are not to be taken as pictures of actual specimens. The difference is, for the most part, easily seen by the practised eye, but, on the principle *maxima debetur pueris reverentia*, a book intended for students should distinctly state, "This diagram is not drawn to nature."

One word about "uterine dyskinesia." We once knew a gentleman who would not get up in the morning. In answer to the remonstrances of his family, he said he suffered from a serious malady called "acute insomnia." He had not then had the opportunity of reading the work before us, or he might have called it "matutinal (though hardly uterine) dyskinesia."

Although we have felt obliged to point out the defects in this book (all the more as coming from the pen of an eminent man), and have given our reasons for saying that it cannot be considered a trustworthy guide for youth, we cannot but commend the good feeling which pervades it, nor the industry which its author has displayed in the perusal of contemporary literature. While, however, we cannot recommend it as a text-book, the student of the burning question of the "mechanical system" should nevertheless see how much its champion is able to say in its favour.

Abstracts
OF
INTRODUCTORY ADDRESSES
DELIVERED AT THE
PROVINCIAL SCHOOLS OF MEDICINE
AT THE
Opening of the Session 1883-84.

OWENS COLLEGE, MANCHESTER.

PROFESSOR GAMGEE commenced by saying: There are times in the history of individuals and of institutions when it is eminently useful to cast a retrospective glance, and to endeavour to estimate the work which has been done, to survey the actual position occupied, and to contemplate the prospects which unveil themselves. It is just ten years since this College moved from its first modest abode in Kay-street to the building in which we are now assembled. In the twenty-two years which had elapsed since its foundation, the College of John Owens had, indeed, made giant strides; for, thanks to the ceaseless devotion of its first governors—the original trustees—and still more of the body of governors which immediately succeeded them, no less than of its small but brilliant staff of professors, it had lived through a period in which it had to encounter some of that indifference and want of appreciation which is more dispiriting even than direct opposition, and it had won for itself, in Manchester and the whole district, sympathy and approval. Had those who first laid the foundation of the reputation of Owens College been imbued with purely utilitarian views of education, or had they anticipated that peculiar delusion of our own days, the movement which has, by a misnomer, been termed "the university extension movement," and which tends to spread throughout communities the error that popular courses of lectures on various branches of knowledge, delivered by young men who have recently taken university degrees, constitute in any sense academic training, I need not tell you that their success would have been far different from what it has been. But they were imbued, on the contrary, with the spirit that the College which they were fostering, and to which they wished to give the scope, if not all the

aims nor all the functions of a university, must, above all and before all, be a place where learning is studied and taught for its own sake; and that, in order to exert that influence which great academic institutions have exercised in the past, it must be not merely as a place of teaching, but as a centre in which learning is added to by the labours of those who teach—a place of research, a centre of light.

But I wish to ask, What has been our progress in the ten years which have passed, and where do we stand to-day? All departments of our College have been extended, both by the addition of teaching appliances and by the addition to the teaching staff. Newly founded professorships of English language and of applied mathematics; an additional professor of law; the separation of political economy from the subjects, still too numerous, confided to the professor of logic and mental and moral philosophy; the appointment of an additional assistant-lecturer in classics; and an assistant-lecturer in history and English literature—these are some of the chief changes on the Arts side of the College. Our science courses have undergone still more remarkable development during the last ten years, and to these I shall direct your attention at somewhat greater length. Laboratories of physiology, of botany, and of zoology have been set on foot; and the practical teaching of geology, both in the museum and in the field, organised as is only possible when the subject is in the hands of an enthusiastic professor who makes it his own study. The modern method of teaching natural science is, as you all know, based upon the principle that, wherever this is possible, the student should be brought in contact with the very object of his studies, and, by simple observation, or, when this is requisite and possible, by experiment, become acquainted with all the phenomena which it presents; hence this method of teaching requires museums and well-fitted laboratories. Teaching by mere lectures, however well illustrated these may be, has more and more made way for a system in which the systematic lecturer deals with the principles of a science of which the details must be learned by each student for himself in the laboratory and the museum. Spacious though they appeared to be, the new buildings, opened for the first time in 1873, did not offer adequate room for the practical teaching of the various branches of natural science. In a new building of the medical department, to which I am shortly to make reference, has now been completed a laboratory of physiology, which offers every facility that the worker can desire, and which is surpassed by few at present existing. Within a few weeks, I believe, the foundations are to be laid of a great natural history museum, in which our collections of botany, zoology, and geology are to be lodged, and which is to contain spacious laboratories devoted to the pursuit of these sciences, which will give the same facilities to those anxious to cultivate them which are now already offered to the student of physiology. So magnificent had been the provision made for the teaching of chemistry in these buildings in 1873 that I have not to tell you of any remarkable structural extension of this department. A record of the past ten years would, however, be incomplete if it did not refer to the fact that Mr. Schorlemmer, who had long been the special lecturer on organic chemistry, was in 1874 appointed professor of this science, which he has done so much to advance by his researches, that the laboratories, new in 1873, if they have not been found too small, have not proved too large; and that, whilst no small fraction of all the original scientific work done in Owens College has emanated from them, they have supplied professors to the newly founded Colleges at Leeds, Sheffield, Newcastle, and Dundee.

But if the Owens College has developed marvellously by the differentiation and development of its older studies, unquestionably the greatest of its recent developments has been due to its incorporating within itself a medical department. Ten years ago the incorporation had just taken place. This union was brought about amidst the sanguine hopes of many, but yet not without the anxious fears of some of the friends of the two institutions. To-day we recognise the success of the policy which dictated it. The new buildings of the medical department were duly opened just nine years ago, and were considered, with justice, to be amongst the very best devoted to such purposes in the kingdom. But nine years have wrought great changes. The number of our students has well nigh doubled. Emulating, even surpassing, the departments of art and science in the extension of its courses of study, the medical department has added to its curriculum many new courses, whilst the teaching of others has been greatly extended, and has been made more and more practical, in accordance with the tendency which I have already referred to when speaking of the teaching of the natural sciences. The buildings which nine years ago were sufficient, were three or four years ago already recognised to be no longer adequate to our requirements, and the Council determined upon the large extensions which have just been completed, and which constitute the new buildings of the medical school which are to-day thrown open to your inspection, and which are henceforward to be occupied. In the new buildings we have, for the first time, large and efficient laboratories in pathology, a subject which has developed in a singular manner in recent times, and of which the importance is now fully recognised. A large materia medica museum and two laboratories will enable the professor of materia medica (with the aid of a recently appointed assistant lecturer) to develop, as was before not possible, the teaching both of materia medica and pharmacy, and of pharmacology and therapeutics. Besides a new students' reading room, and a library and reading-room reserved for members of the Medical Society, the new building contains room for a collection of models and appliances illustrating the course on hygiene and forensic medicine; and last, but not least, a fine series of rooms, including a lecture-room, which constitute the new physiological laboratory of the College, to which reference has already been made.

I shall not attempt to recount to you the details of the contest which terminated in the granting, in 1880, of a Royal Charter to the Victoria University, except to say that we found far more friends and sympathisers than enemies or opponents; and that it was, doubtless, to the warm advocacy of many of the most enlightened and influential members of the older universities, both in England and Scotland, that the aspirations of Owens College found a realisation, though not precisely in the form which had originally been desired, in the foundation of the Victoria University, whose seat is in Manchester, and whose first and only college is the Owens College. When, early in 1880, we heard that the Crown was ready to grant a Royal Charter, constituting the Victoria University, and conferring upon it power to grant "all such degrees and other distinctions as now, or at any time hereafter, can be granted by any other university of the United Kingdom," it was not without deep disappointment at the proviso which it was stipulated must, of necessity, follow, to wit: "Subject to the proviso that the University shall not grant degrees in medicine or surgery unless and until authority in that behalf is given by our further charter or by Act of Parliament." The reason which led to the introduction of this proviso was so obvious, and the hopes of future concession such, as to render it, in the opinion of all, expedient that the charter should be accepted, in spite of this anomalous disability. The reason was this: the subject of medical qualifications and degrees, together with the working of previous Medical Acts, was at that time under the consideration of a Parliamentary Committee, which was shortly afterwards succeeded by a Royal Commission appointed to inquire and report on the same subjects. This Commission on the Medical Acts presented its report at the close of last year, and unanimously recommended that the Victoria University should have conferred upon it the powers possessed by all other British universities. Consequent upon this, a supplemental charter was granted on March 20th, 1883, conferring upon the Victoria University power to confer degrees in medicine and surgery. In the comparatively brief interval which has elapsed since this supplemental charter was granted, the University has appointed external examiners in medicine, who have co-operated with the resident members of the Board of Studies in drawing up draft statutes and regulations for degrees in medicine and surgery, which have substantially been approved by the University Council, and which, it is hoped, may soon be promulgated after receiving the approval of the University Court. When I mention that the first external examiners in medicine of the Victoria University are Professor Lister, Professor W. T. Gairdner, Dr. W. O. Priestley, Dr. Lauder Brunton, and Mr. Mitchell Banks, it will be admitted that the University has given a guarantee of its desire that its medical and surgical degrees shall command the confidence of the profession, and take from the very first a high position. There are many amongst those whom I am addressing who doubtless feel some curiosity to know what are to be the essential characters of our medical and surgical degrees; and I regret not to be able to give some interest to the present address by revealing what must still for a little time continue to remain confidential

particulars, and that I must confine myself to remarks of a general character. At a time when the standard of the medical qualifications granted by even the least efficient of the licensing medical corporations is being greatly raised, it is expedient that a new university about to confer medical degrees should disavow any intention to seek popularity by conferring titles upon any but the most honourable terms. A degree in medicine should, in my opinion, offer a guarantee that its holder is possessed of more than a minimum of general education, such as is demanded by the General Medical Council of all medical students without exception; it should still more offer a guarantee that he has obtained a fundamental, though not necessarily profound, knowledge of the sciences upon which medicine is based, acquired not merely as a result of reading, but of carefully directed and systematised instruction; it should, lastly, ensure that his professional education has been exact and yet broad, including certain branches of knowledge which, though not insisted upon by the ordinary licensing bodies, are yet necessary in one who is to be considered as having received a liberal medical education.

I trust that no one who has listened to this address will have misinterpreted the motive which has guided me in selecting the subject of my remarks. It was not, believe me, that I might speak in a vainglorious spirit of what has been achieved in a comparatively short period by the bodies with which I have the honour to be connected, but rather that I might impress my hearers, and especially the younger members of this College, with the responsibilities which rest upon us to utilise to the very utmost the splendid opportunities which are before us of building up in this great city a college or a university which shall do justice to the generosity of our benefactors, and which shall make for itself a reputation which shall not be inferior to those of the great universities whose annals are linked with our national history, and whose glories are the pride of every Englishman.

QUEEN'S COLLEGE, BIRMINGHAM.

AFTER some introductory remarks, Mr. BENNETT MAY drew attention to the high position taken by the students of the College at the various examining bodies during the past year. The results, he said, showed that students find here the agencies by which to accomplish what is necessarily one of their main objects, and bear tribute to the wise liberality with which the council had sought to promote the welfare of the school and increase the facilities and attractions for medical education. "The curriculum of study for the medical profession has for years been a subject of inexhaustible discussion. As it now exists it is the resultant of many compromises between conflicting needs and interests, and though supposed to stand in need of a good deal of repairing, is probably more efficient for its purpose than any product of the philosophical reformers." The due relationship that should exist between the scientific and practical in the training of the student is one source of contention, and it is curious to observe the conflicting and opposing views entertained by different authorities on this point. Some can see in such an examination as the preliminary scientific of the London University, nothing but a "horrible invention" for overloading the study of medicine with material quite foreign to its satisfactory pursuit, and cannot exaggerate the evil effects on the minds of those who are occupied with it; others would compel every student to undergo such an ordeal in physical science, believing that only thus can he commence his medical study proper with a mind trained to observation. The truth is probably somewhere between the two extremes, and it is clear that the question does not admit of any definite answer as applicable to all grades of students, that considerable latitude must be permitted, and that so long as the minimum standard required of all is not overloaded with physical science there is no ground for complaint. Mr. May mentioned this subject because he wished to advise all at the outset of their career to consider well what qualifications or degrees would best serve their interests, and were within their reach, without sacrificing the necessary and important to the less important branches of study, and drew attention to the number who lose valuable and irrecoverable time in the attempt to accomplish what their opportunities, if not their abilities, prevented their ever completing, and others who have their whole career modified by the accident of early life, ignorance of the value of degrees in medicine and the Fellowship diplomas of the Royal Colleges. As evidence of this value Mr. May cited the numbers who in after life make great sacrifices to obtain them, or who find it expedient to purchase substitutes, and the discussion on medical titles which finds a permanent place in the columns of the medical press. "What is much more serious than any deficiency in preliminary scientific training is the fact that so many men leave their school with a very limited idea of the nature of the duties which will be required of them in after life, and of the subject which will form three-fourths of their practice and nearly all its anxieties. The only remedy is a voluntary extension of the teachings of the ordinary curriculum." After some words of advice as to the best modes of accomplishing this, and of managing the student's career, Mr. May passed to the main purpose of his address.

"I wish to help you to appreciate the agencies which have been operative in establishing our national school of surgery, and I will ask you to go with me while I touch on some of the methods and characteristics of the men by whose achievements this has been accomplished. At least, three orders or faculties of mind are prominent: the scientific or investigating; the practical or operative; the philanthropic or devotional. Of the former, John Hunter, our greatest anatomist, was a type. Before his day surgery was a rude manipulative art; but in the light of the large knowledge Hunter's labours first shed on the development, structure, and function of the human anatomy, physiology, and pathology became the foundation of the science and art of surgery. The 14,000 specimens and dissections which he bequeathed, and which are now embodied in the splendid museum of, the Royal College of Surgeons, constituted a monument of patient work and investigation such as no other man had ever left behind him. In Sir Charles Bell, who extracted from nature a magnificent secret (the functions of the spinal nerves), and that without the modern stimulus of 'endowed research,' the genius of the investigator was diffused in other channels and accomplishments; yet few have excelled him in the devotion and sincerity with which he led the scientific life, and thereby promoted the advancement of surgery. The story of his life is an education, and teaches us all to find comfort and calm in high aims and perseverance; vanity and discontent were far from him. When the Guelphic Order of Knighthood was bestowed on him, no petulant clamour for higher distinction escaped him. Surely this present clamour for titular distinction is unworthy of men who have knowledge of life and familiarity with death."

After some remarks on the place of anatomy as the foundation of practical surgery, and the necessity of working at it with their own hands in the dissecting-room, Mr. May said: "The study of anatomy has always enjoyed a high repute in this College, and additional facilities have recently been provided by the Council in improved and extended dissecting-rooms. It is one of the advantages of a school such as this, of moderate size, that every student has unsurpassed opportunity of making himself by his own hands a thoroughly sound anatomist." Then turning to the subject of pathology, the "science of disease," reference was made to Hunter as the founder of this science, and to Abernethy, Brodie, Bell, Travers, and the illustrious Paget as contributors. Having mentioned the importance of being constant in attendance on post-mortems and assiduous in the use of the microscope, a caution was given to students not to permit the engrossing study of details, however important, to throw into the shade the great lines of clinical observation so as to prevent these being cultivated with the care they require. Most of us must leave to others the collection of the dry facts of science, and be content if we display sufficient readiness to develop the conclusions to which they point, and to turn these to practical account.

"As a practical and operative art surgery has attained a high degree of perfection and completeness at the hands of men whose chief characteristics are the boldness and dexterity with which they accomplish their operations. These men work in the spirit and with the aim of the artist to accomplish dexterous workmanship of high artistic excellence. Prominent amongst his contemporaries stands Sir Charles Bell, to whom a French critic paid the dubious compliment that he was the only Englishman of his day who operated like a Frenchman—that is to say, with grace and without affectation. Contemporaneous with Bell was Sir Astley Cooper, and, nearer our own time, I may mention Liston, Syme, and Fergusson, men whose names adorn many

pages of your text-books of surgery. From their successes we learn the lesson to avoid slovenliness, haste, and affectation in our work, and to execute our measures with courage and decision. But the greatest skill in research, combined with the most brilliant triumphs of the knife, will not ensure successful results unless blended with the spirit of devotional care of the individual patient, so as to pilot him through the injuries inflicted by Nature, or the art of the surgeon. It is not enough to be brilliant in inflicting injuries; we must be assiduous in their repair, we must bring to bear our general principle on the individual sufferer, and this requires the exercise of a few homely virtues, as patience, method, cleanliness, and forethought."

The remainder of the lecture was principally occupied with remarks on clinical work and the place of specialism in surgery, with its bearing on the student's career.

LEEDS SCHOOL OF MEDICINE.

DR. CLIFFORD ALLBUTT, after referring to the rapid passage of time, proceeded as follows:—That on your first freedom, gentlemen, you should be tempted to extravagance is likely enough, and you may be led into some of that waste of power which your professor of physiology tells you may be a condition of new growth. A lad of spirit and courage may sometimes even be more likely to play the fool than one whose nature is less exuberant. Some young men are sedate and placid not because their principles are strong, but their impulses feeble. Yet freedom, with all its waste and error, is a glorious inheritance, and into this you now enter. Let us, by timely warning, keep your wills and desires in the right way. You escape from the uniformity of mechanical discipline in order that you may develop for yourselves a living system, inspired by your own energies, and drawing in food from many sides. And, remember, freedom brings its losses also. While in tutelage, with no anxiety of your own, you had all your needs cared for, now you are free you must take thought for your own to-morrow. The strength you will waste henceforth is your own, the stores you dissipate your own in-gathering.

It is our business, gentlemen, to extend life to its utmost tether. To this end we spend our skill, our learning, and our shrewdness. It is for man to see that such life is worth preserving. For him it is to know that to die in youth gloriously is better than to live ignobly for a century; and I read with pain the sneers of those who even jealously seek to diminish the national reward of great chiefs who have staked life for life at their country's call. To say they are rewarded for destroying life, while we are unrewarded for saving life, is a perversion of the truth. Those men are decorated with titles appropriately, because such titular ornaments derive from times earlier and other than these, and belong to State services. Such decorations are, indeed, scarcely in the spirit of modern civilisation, and could not naturally arise in a new society. In our own, they are honourable and picturesque traditions, and better reserved for ancient forms of State service. The services of the private physician or surgeon are of a private and personal character, and rendered, not to the State, but to the individual. Public medicine is, indeed, working out the conditions of those great social fusions which hereafter shall absorb individual wills into new wholes, and reveal the future of mankind—societies as yet thwarted and disintegrated by the degrading and repulsive squalor of modern trade-work. As yet, however, it does not deal with very large conceptions, nor with the higher aims of national life. Therefore all the recent cries for "doctors in the House of Lords," for "political power for the profession," and so forth, appear to me to be based upon a false, and, I must add, an undignified idea of the republic of science. Most of you, perhaps all, who listen to me as students, have set yourselves on towards a light which shines brighter upon your faces than upon mine, and of those who belong to my sphere of service. The general practitioner of medicine, as I often witness, even to my shame, devotes his profession, and indeed his life, to the good of others, after a fashion which ennobles any work. Herein, gentlemen, is our true patent of nobility, loftier far than any coronet. The doctor who does, however, honestly the work only that he is paid for is rare in the ranks of general practice; and his life, I repeat, is a useful, but not a noble one. General practitioners obey a far larger and more lovely idea than that. Our brethren walk fearlessly, unconscious of heroism, beside the pestilence, snatching men from its breath, and bearing away the stricken to safety. When the typhus epidemic fell upon us in 1865, and our fever hospital was a pest-house, men from general practice stood by me, holding their own lives cheap at the call of duty and humanity. Less brilliant, but in its steadfast unselfishness, perhaps, incomparable, is the voluntary sanitary work done by general practitioners before the establishment of sanitary districts. Of these services the careless public is yet scarcely aware. Did the members of any other profession ever seek odium, and even rancorous enmity, by persistent endeavours to cut down their own incomes in the interests of their clients? To speak plainly, enteric fever, for instance, was worth perhaps a steady hundred a year to many a town or country practice—not counting the luck of epidemics. Now, hundreds of doctors—you know many of them yourselves—in human pity, have striven to suppress this and other such maladies; spoiling their own incomes, and earning, not the thanks, but even the curses of the public; offending not the poor, but the rich—the landlords, the thriving farmers, the poor-law guardians—the class upon whom the rest of their shrunken practice must depend. Again, in the quiet heroism of daily life, these same men and their brethren labour, day and night, for sick and suffering persons, who can never repay them in money. Some walk in the squalid and hideous places of large towns; others among the poor widely scattered over moor and fell.

Such, gentlemen, is the body of men in which you are to be enrolled; men who would not be human had they not faults also. Let me warn those of you now entering into practice against some of these. Our worst fault is, I fear, that we are a somewhat touchy and jealous class. We work under conditions which tend to breed distrust. Unlike the bar, we do not play with our cards above the table. In our more intimate work it is terribly easy for one doctor, by little intangible tricks, to elbow out or depreciate another. Then, for the same reason, the public often fail in loyalty and candour with us, and work mischief in their own little ways. Still, these jealousies might be avoided, and are avoided, by genial and upright men, whose first regard is for the rights of others. We are too often disposed to assume some property in our patients, and to think, because they came to us at times, they have no business at other times to consult other men. That patients who dodge from doctor to doctor are very foolish is true, for they lose all that personal devotion which doctors bestow on a staunch ally; and it is not only a foolish, but an uncandid and unfair, thing for a client to place business of any kind in the hands of two men simultaneously without a due understanding between all parties. But we must not go beyond that, and say a sick man has no right to consult whom he pleases, and deny his right to be the judge of his own interests. A man's life is very dear to him, and our self-reliance becomes a positive evil when it degenerates into exclusiveness. Another warning I give you, gentlemen, is this—if you think you are aggrieved, avoid the wretched fashion of writing letters to your brother. Charges are thus made without reserve, words easily used on paper which would have lingered on the lips, but which cannot be recalled; the favourable influence of man on man is lost, and a lifetime may barely hold mischief which, in a personal interview, would have gone piping down the wind. Few men mean to injure their neighbour, or even to take undue advantage of him; but men lack imagination; offence is taken where none is meant, facts are misrepresented, false assumptions are made, and a grave quarrel arises out of nothing. The expression "medical etiquette" is an unfortunate one. It leads the public to suppose that we have peculiar rules "which no fellow can understand," and which are not wholly in their own interest. Our hatred of quackery of all kinds again may become undignified, but, to our honour, this rests at least as much in a clear view of the probable waste and futility of it, as in the fear of loss of custom. Yet I cannot but smile sometimes at the round denunciations of quackery in a patient by a doctor, who, at the very moment, is himself caught by some humbug equally contemptible in the eye of a farmer, an engineer, or a stock-broker. As men become more enlightened, they will recognise more and more the value of an authority in matters of opinion, and better understand how carefully to exercise their choice of competent guides.

In matters of wider bearing—in the larger social and political questions—we shall do well, as Bacon says, "not to usurp a kind of dictature in sciences, nor with overconfidence to pass censure upon matters in doubt, nor to give

way to peremptory fits of asseveration." All professions, not one only, tend to put on the priesthood, if not checked by conflicting authority; to give themselves airs, in short. A doctor's one idea being very properly a sound body, he proclaims that, if he were king, no members of a family tainted with consumption or insanity should marry; as if the frail tenements which held the spirits of Keats, or of Elia, of Arthur Hallam, or of W. K. Clifford, bore not freights more precious than a wilderness of cricketers. To come nearer home: Addison was one of the ablest teachers the art of medicine ever knew; now Addison was bred of insane blood, and died by his own hand. Who are we who pretend that we can lose such lives as these, or who deny that their genius drew any quality from the instability of their blood? Our answer to questions of this kind is to point out the dangers clearly, and wherein they lie, or increase; but not to claim alone to bind or loosen, nor to measure all things with our own foot-rule.

The inadequacy of science to solve your needs will shorten your powers in other directions besides the moral and social. I must repeat to you the old distinction, that medicine is not a science, but an art, and is no more to be restrained by the limits of exact science than is landscape-painting. Art leads and does; science follows and explains. Science corrects, chastises, and establishes our methods, or may even initiate them, but it cannot confine them. This training of sense and inference in the absence of science made Hippocrates a physician of no mean skill and insight; it has made a valuable helper of many a doctor of modest scientific acquirements; and it makes perhaps the larger part of the gifts of the best of us—that quality without which the rest is vain. The best doctor is the best artist, and the best medical artist is the master, and not the servant, of his sciences. Those practitioners who complain that we turn out men nowadays who possess wide scientific knowledge, but are no medical artists, have right with them. They feel that a less learned assistant gains with them a facility in dealing with exigencies which puts the much-pondering prizeman to shame in the sick-room. Like a tennis-player, he has made a good chase before his mathematical antagonist has measured and calculated the tangents and frictions. No man should go into practice alone until he has so trained hand and eye that his aim is true; without that, all the learning of the schools is vain. Better is the sling and the stone with the true hand and eye than all the armour of Saul without them.

There is nothing so wasteful of strength and purpose as what people are pleased to call "thinking things over," which really means muddling things to and fro, passing generally into a greater perplexity than before, and ending too often in error or confusion. So important, indeed, are the intuitive appreciation of the main factors of a case, the relations between them and their tendencies, that, without these, reliance on those facts which are at once more precise and more limited may be positively misleading. Students and young practitioners rely, as a rule, far too much on their preciser data, and so far the discovery of instruments of precision has some temporary disadvantages.

These occasions are scarcely fit for scientific lectures, which are not human enough for hours when we meet to welcome and fortify each other for the days that must come—days laden with many trials, laden with many hardships, laden with many griefs. You and I will need for our future work all the cheer and all the strength we can give each other. Our work lies day by day in the darker chambers of human life. The wife or father will see the loved eyes grow silent, the loved cheek grow cold, in spite of all our skill, and we must too often close the door on a bereaved home with sinking heart. Yes, gentlemen, you may get, and I hope you will get, a certain use in these things; but you are not men if your hearts do not feel them. And so you may forget that after all there is more gladness than pain on the earth, more beauty of life springing from her bosom than death falling back to her. As you are young, you will rejoice in the life, you will have vision for life only; as you grow older you will be touched rather with the mystery of evil—*das Elend des Lebens*—with a sense of the weary and unintelligible weight which darkens the lot of so many beings made for happiness.

SHEFFIELD SCHOOL OF MEDICINE.

MR. ARTHUR JACKSON began his address by remarking that fourteen years had elapsed since he had the honour of delivering the introductory address, and during that time many changes had taken place. They were now about to build a new school, to be incorporated with Firth College, and with every prospect of pursuing a career useful to the people, and advantageous to the medical profession of Sheffield, but they were obliged to ask the people for help. Over and above the subscriptions already promised, they wanted about £2500 more to enable them to erect a building suitable to the requirements of the time. He proceeded to give an account of the medical history of old Sheffield and its medical school, and afterwards, addressing particularly the students of the school, said that from the past medical history of the town they might learn how energy, patient unceasing work, great courage, and devotion to the profession might overcome great difficulty and opposition, and lay the foundation of success. Some of the things they ought to speak much more strongly about were the education of the young, natural heritage, the keen race for wealth, extravagance in religion of whatsoever kind, intemperate work, intemperate play, intemperate travelling—they all had an important bearing on the health of the country. To begin with the education of the young. What was education? Was it simply cramming them with knowledge to pass an examination, or was it the art of developing the various physical, intellectual, and moral faculties? Did it mean that some attention should be paid to the temperament, the development, the natural strength or the natural weakness of the individual? or did it mean that all were to be educated alike, without regard to inherited disease, whether nervous or otherwise? Should they, without reference to the young, improve the strength of the country by compelling all alike to be educated by Act of Parliament, when their minds were so little developed that a tension was put upon them which they were unable to bear? This was one of the social problems which, he prophesied, they would be able to solve, though men of his generation could not hope to do so. Mr. Jackson then passed on to the subject of natural heritage, the laws of which, he observed, played an important part in the health and morality of a nation. If these laws were broken, there was no vitality strong enough to defy at once assault from without and disintegation from within. If degeneracy, insanity, and death were to be avoided, they must cultivate wisdom and self-knowledge, which told them how nations degenerated and died. Such wisdom and such knowledge and such principles of vitality they could gain by considering the history of other nations, and they could avoid degeneracy and postpone death if they could teach the public how to live. Intemperance in a desire for wealth, in the pursuit of religion, of work, and of recreation, was another of the great social problems which would require their careful consideration, their most accurate observation. It was steadily on the increase, and was promoting a daily addition to our nervous and other diseases. A certain writer had said that "in the higher departments of trade and commerce, speculations of all sorts were eagerly entered on, and many people were kept in a continual state of excitement and anxiety by the fluctuations of the money market. In the lower branches of trade there was the same eager desire for petty gains, and the continued absorption of the mind in these small acquisitions generated a littleness of mind and meanness of spirit—where it did not lead to actual dishonesty—which were nowhere displayed in a more pitiful form than in certain petty tradesmen. It was not that the fluctuations of excitement unhinged the merchant's mind, and led to maniacal outbreaks, although that did sometimes happen; it was not that failure in the paroxysm of some crisis prostrated his energies and made him melancholic, although that was occasionally witnessed; but it was that the exclusiveness of his life, aim, and occupation too often sapped the moral element in his nature, made him egotistic, formal, and unsympathetic, and in his person deteriorated the nature of humanity. What was the result? It was extremely likely that the deterioration of nature which he had acquired would be transmitted as an evil heritage to his children." One could not speak without great diffidence upon intemperance in religion for fear of doing harm, but as a medical profession they were bound to say that all unhealthy excitement, religious or otherwise, must be wholly bad and without any good result. He much wished they could talk these matters over with the ministers of religion, as one could then speak more strongly without fear of doing harm, but from some cause or another, the old partnership between religion and medicine had been completely dissolved, much, he thought, to the weakening of both. Moral and physical diseases went together; they were intimately connected. In former days the divine and

the physician were often one. To re-establish this connexion, if both were to recover their influence, must be their aim; to prevent sin and disease, not only to cure it, was the object of both, and in order to achieve this union complete and indissoluble must be cemented. Time would not allow him to say much of intemperance in work or in recreation. Work and play should be men's servants, not their masters. Both should be taken quietly, and it was a grievous thing to see how little men could be successful in work, unless they did it intemperately. When men in the present day have realised either a fortune or a competence they are not in a position to enjoy it. They are generally either without health, or without resources or the power of enjoyment. It was one of the curious facts of life that so few men knew how to be idle, how really to rest themselves. The faculty of laziness was one that all hard-working men and women should cultivate; it would add to their length of days, to their happiness, and to the comfort of those around, and when the time for laziness was over they would do their work better and quicker than they otherwise would. The conclusion of the address Mr. Jackson devoted to the rewards and to the disappointments which awaited his hearers in the life they had chosen. Few medical men were elected to posts of honour open to those in other walks in life. This did not matter except in so far as it influenced sanitary and preventive legislation. It interfered with their sphere of usefulness; it led to their not being asked their opinion upon important sanitary measures, and to their being ignored when they ventured to give it unasked. With the exception of these drawbacks he knew no life more interesting, more fascinating, in spite of the intense anxieties which accompanied it. They were constantly brought in contact with the higher life, with the better side of human nature, which should tend to rouse their own better feelings, should stimulate them to a better life, and should help to prepare them for that change which sooner or later must come.

PROFESSOR HUXLEY ON STATE INTERVENTION IN MEDICINE.

THE address delivered by Professor Huxley before a very numerous assemblage at the London Hospital, on the occasion of the distribution of prizes on the evening of the 9th inst., was one which dealt with some of the most pressing questions of the day in connexion with the medical profession, and, as might be expected, was vigorous and well-reasoned. The main topic treated was that of the intervention of the State in the affairs of the medical profession, the grounds for such intervention, the limitations to be placed upon it, and the best mode of carrying it into effect. Mr. Huxley ridiculed the idea of the State being called upon to protect the public from incompetent persons and quacks in general, owing mainly to the impossibility of prohibiting practice by unqualified persons. The public must take care of themselves in this matter. It was a different thing, however, and quite a legitimate ground for State interference, that no person should die without some official recognition of the cause of death; that the law should have recourse in civil and criminal cases to the evidence of experts, and that medical appointments should be held by persons known by the State to be competent for the duties required of them. Passing to speak of the mode of such State intervention, he alluded to the condition of things prevailing in his student days, when there existed twenty-one licensing bodies, including the Archbishop of Canterbury, who all granted diplomas without any central control over the means employed by them. The system—or rather want of system—that then existed was one degrading to the profession; and the Medical Act of 1858, by establishing the Medical Register and the General Medical Council—a body which, although not possessing absolute control over the licensing bodies, had exerted a moral influence over them,—effected certainly a great improvement. The number of licensing bodies was reduced to nineteen, and, with a few notorious exceptions, their diplomas were fair evidence of competency on the part of those holding them. But the time had come when single-subject diplomas should cease to be granted, and no one should be allowed to practise who was not qualified in medicine, surgery, and midwifery. He thought the "conjoint scheme" a complex and rather clumsy contrivance for effecting this aim, and that the Government Bill was far too sweeping a measure. The remedy, in his view, was simple—viz., that on and after a certain date no practitioner should be placed on the Register who had not the tripartite qualification; and, secondly, that the Medical Council, or some central authority, should appoint coadjutor examiners to act with those appointed by the licensing body. In conclusion, Professor Huxley adverted to what he considered to be three evils in the present system of medical education as conducted in London. Looking to the vast amount of knowledge now required of the medical student, it was plain that the four years' curriculum was all too short. It was not practicable to lengthen the curriculum forwards; the age of twenty-two was late enough for young men to enter on practice. But if, instead of the useless test of "general education," a preliminary examination in science were enforced, the student of eighteen years could enter on the medical curriculum better prepared for his special work, and without having to waste his time in gaining knowledge of elementary science. Another defect was that the subjects of the first half of the curriculum—subjects included under the phrase "Institutes of Medicine"—were taught at so many different centres—a great waste of teaching power which could be better utilised in imparting the practical instruction of professional duties. He was therefore strongly in favour of "centralising" the teaching of these subjects in one or two places, and he knew of many eminent men in the profession who coincided in this view. Finally, he considered it a reproach to London that there should be no institutions where the *science* of medicine could be pursued, where men possessed of the inborn gift of investigation could apply it to medical science. If a Claude Bernard or a Ludwig turned up in London at the present time, he did not know what they would do with him; they would have to export him to Germany or to France.

GRANTS FOR SCIENTIFIC RESEARCH.

AT the last annual meeting of the British Medical Association, held at Liverpool, it was decided, on the recommendation of the Scientific Grants Committee, to authorise the Council to offer two research scholarships, of the value of £150 each per annum, tenable, at the discretion of the Scientific Grants Committee, for three years. Application should be made at once, addressed to the Honorary Secretary of the Committee, in order that they may be placed before the Scientific Grants Committee at their meeting on the 17th instant. The following scientific grants were also made:—Dr. A. Waller: A grant of £20 for defraying the expense of work being carried out for Dr. Waller by Messrs. Elliot, for an examination of certain points relating to Animal Electricity, more especially Electro-tonic Phenomena and Internal Polarisation. Dr. Thin: £20 in aid of the expenses of a research into the Bacillus Lepræ, and its Transmissibility to Animals by Inoculation. Mr. A. Lingard: £50 in aid of an inquiry into the Pathology of a Peculiar Contagious Ulcerative Disease in Calves, resembling Noma (Gangrenous Stomatitis in the Human Being). Dr. Sidney H. Martin: £5 in aid of a research into the Action of Papain. Dr. Imlach: £50 renewed grant in aid of a methodical investigation of the question of the communication of Bovine Tuberculosis to Calves and other young Animals through the Milk. Dr. Francis Warner: £25 renewed grant for a research on Muscular Movements by means of the Graphic Method, such movements being considered as signs of the conditions of the Nerve-centres. Dr. Astley Cresswell: £30 for an observation on the Temperature of Adults, under varying circumstances, during Sea-voyage. Dr. Heneage Gibbes: £20 towards the expenses of an investigation into the Chronic Changes of the Blood during Inflammatory Action.

ROYAL NATIONAL LIFEBOAT INSTITUTION.—At a recent meeting of this institution rewards amounting to £384 were granted to the crews of lifeboats of the Institution for services rendered during the past month, by which 113 lives were saved, and payments amounting to £3427 were made in connexion with the 273 lifeboat establishments. Several rewards were also granted to the crews of shore boats and others for saving life from shipwreck on our coasts.

THE LANCET.

LONDON: SATURDAY, OCTOBER 13, 1883.

SIR JAMES PAGET'S admirable address at the Working Men's College, Great Ormond-street, London, was characterised by strong sense and sound science. The special views he propounded were not new, but they were true. The lecture as a whole might, indeed, have been entitled "Change as a Mental Restorative." Of the three features or phases of the recreative process to which Sir JAMES alluded, the first, "change," was the chief and most important, comprising and, in so far as the physiological principles he afterwards laid down come into play, necessitating the other two—namely, "wonder" and "skill." The law of restorative or useful *change* upon which Sir JAMES PAGET laid stress is one which was first propounded in these columns—namely, that the *re-creation* proper to any individual, and healthily stimulative to his recreative or recuperative faculty, is some form of "work" for which he has inherited a special capacity. In short, the *rationale* of restorative "change" is the application of a new and appropriate stimulus to the faculty of recreation, by the awakening and gratification of some dormant love or propensity which lies deep down in the individual nature, and has been inherited. In this way it comes to pass that the special pleasures of individual lives are ancestral; or, as Sir JAMES PAGET puts it, "survivals in us of instincts which belonged to our distant ancestors, who of necessity had to kill, to fish, to hunt, to clear the forests, and make the roads." The skill of the physician who prescribes "change" as a restorative consists in the discovery and awakening of the latent ancestral instinct proper to the individual. This is the principle laid down some years ago in THE LANCET, in a series of papers on "Change as a Mental Restorative" (see vol. i., 1880, pp. 907, 947, 990), to which Sir JAMES PAGET has now given the high authority of his approval as a keen and practised observer, and forcibly illustrated by reference to his own personal experience and the habits of well-known men. It is, undoubtedly, a principle which ought to be generally recognised and applied in practice. The mere recommendation of "change" vaguely is idle; meanwhile recreative change is one of the most powerful agents we possess for the treatment of disease, derangements and disturbances of the mental temperament and the mind, but it is one which to be harmless and useful needs to be specifically applied.

Re-creation is the physiological complement of creation or education. Science teaches us that creation is eductive. We apply stimuli and provide conditions in response to, and under, which the germs of organised matter are vitalised and organised instincts and propensities become habits. Education, properly so called, is a process of stimulation and training specifically directed to promote the growth, and control the development, of the brain. By a curious coincidence, while Sir JAMES PAGET has been lecturing on "Recreation" as a physiological process of health-preservation in London, Mr. PRIDGIN TEALE and Dr. CLIFFORD ALLBUTT, of Leeds, have been addressing words of wisdom to the Social Science Congress at Huddersfield on the influence of education on health. Mr. TEALE, President of the Health Section, strongly denounces the system of "forced running" adopted in teaching and learning, and very clearly defines the true position of the practical question, which has been somewhat awkwardly discussed in the lay journals of late. He says, 'Hard work and long hours do not of themselves constitute over-pressure in education or over-work in life. It is the work done under perpetual worry and anxiety, and under the compulsion of want of time, that tries the health of young and old." It is because we are importing into modern education hurry, worry, and anxiety, selfishness, competition, and a feverish desire for success, prize-winning and place-winning—all tending year by year to grow in intensity and to become more powerful agents,—that he foresees injury to health, degradation of intellect, and a departure from a true ideal of education. Obviously, there can be no culture, in any true sense of the term, when the educator or brain-cultivator so "forces" the process of natural evolutionary growth as to hurry what nature has ordained to be done in a leisurely way, and substitutes an intellectual tornado for mental calm.

The haste to be wise is not less ruinous than the haste to be rich. Indeed, the two ideas are identical. Education is too commonly regarded as a process by which marketable knowledge and skill are to be attained, and the aim of the teacher and of the scholar is one—namely, to obtain quick returns. All that is not, on the face of the facts, saleable or utile is cast aside. Professor TWEEDY stated the truth in perspicuous and graceful terms when he said "This word 'utility' is the bane of modern education; it is tending to eliminate all culture from scientific pursuits. It is an *ignis fatuus* that is leading us into a bog of stolid dulness. Those who cannot see any relation between a liberal education and the requirements of practical life are constantly clamouring for the substitution of technical instruction for classical and literary studies. The pernicious influences of the doctrine of utilitarianism have not, perhaps, made such havoc in England as they have in America, but they threaten sooner or later to confound us." Again, "To be useful and accomplished men, it is necessary for you to engage in those exercises which will train your external senses, cultivate your understanding, and refine and ennoble your reason." This is strictly true. Education is the cultivation of powers and capacities and the educing of such formulated expressions of power as, having within them—inherited—the element of organisation for special purposes, are developed as *faculties*. There is no time to think of these things in the breathless hurry of modern education, and it is small wonder that the elements of mind are overturned, its constitution disorganised, mental health rendered impossible, and the "diseases" of disorder and derangement set up, under the baneful influence of a system which is infinitely worse than no system at all. Dr. CLIFFORD ALLBUTT has done good service by showing how mischievously the system of education extant, and unhappily approved—by those who disregard the process of *culture*, and think only of the market value of forced

crops—bears on the pupil-teacher, a modern creation, in which the intelligent organism is treated worse than a two-year-old colt, being made to run a hard competitive race before it is yet strong or independent enough to be weaned. We are heartily glad that these cognate subjects have been brought under the consideration of the thinking part of the community by men who can speak with authority, and we earnestly desire that they may receive the attention their urgent importance demands.

IT is to be regretted that Dr. MICHAEL FOSTER does not oftener favour the profession and the public with his views on questions of education, whether technical or professional. His address at the opening of the session of the Pharmaceutical Society, of which we have already given an outline, was full of interest and, we need scarcely add, of quaint humour. His complete education in all that relates to medicine, including the composition of remedies, gives peculiar value to his views of medical education and all pertaining thereto. His description of the art of coaching showed that he had thought deeply and that he knew much on that subject, and was greatly exercised in the consideration of means for making examinations real tests of soundly acquired knowledge. Two or three points in Dr. MICHAEL FOSTER'S convictions on this subject are worthy of further notice. First, that one great evil of the existing system is the infrequency of examinations—the plan of allowing a youth to go one or two years before requiring from him any account of his stewardship, and then perhaps making the melancholy discovery that he has wasted his time and lost his self-respect. Another is, that examinations are not real tests of a man's merit or knowledge, and may be anticipated by a "coach" who has studied the mind, not to say the crotchets, of the examiner. Dr. FOSTER instanced one case in which a "coach" had learnt that it was good policy to send a few of the less prepared students in first, who he knew would come to grief, so as to ascertain for his more hopeful pupils the kind of questions that were being asked.

The most important suggestions of Dr. FOSTER for securing better methods of examination are twofold. First, he recommends that examinations should be frequent—weekly, if not daily. In other words, that the object of the teacher should be to take precautions that the seed which he sows actually gets into the mind of his pupils. With this object he should examine his pupil very frequently, and test the degree to which he has been attending to the subject which he professes to be studying. We have long been of a similar opinion, and it must be admitted that in many schools class examinations are a regular and frequent part of the teacher's duty. It is to be hoped that Dr. FOSTER'S views on this subject will lead teachers to hold regular and systematic class examinations, and that our examining authorities will soon take into their consideration a plan of recognising such good work in the final examinations. It will be an infinite encouragement to a student to know that a regular weekly attendance in his class will stand him in good stead when the final crisis of the pass examination comes.

There is another point in Dr. FOSTER'S opinions which we note, the more so as it is at variance with some commonly received views. Dr. MICHAEL FOSTER attaches great importance to a student being examined by his own teacher. Many who would like to be considered authorities disparage this arrangement. It may be admitted that the temptation to a teacher is to be partial. This tendency must be met and guarded against by some check, as by assessors from without. But we are clearly of Dr. FOSTER'S opinion that a student's teacher ought to have something to say as to a man's claims and merits at the last. Who can know so well as he what has been a student's attendance, and what his attention to his work? He, too, may know—if a good teacher he will find out in class examinations and otherwise—those mental defects which tend to hinder a man from showing to advantage in a moment of supreme trial, like that of the great examinations. There are many reasons why outside examiners should conduct all qualifying examinations, but teachers should act as assessors much more frequently than they now do. We cannot do more at present than emphasise the opinions of Dr. MICHAEL FOSTER, to which we have referred, and express a hope that they will be taken into account by the present Medical Council, or by its successor, at an early date.

THE Charity Organisation Society has taken a step in the right direction. In their report on Workhouse Infirmaries, 1880, our Commissioners pointed out that if we hoped to combat successfully the pauperising influence of sickness, relief ought to be afforded at the earlier period of the illness, and not reserved till the patient was sufficiently ill to be sent into hospital. They also pointed out that in many cases where breakdowns occurred, these might have been prevented if the patient could have had rest, change of air, or an improved dietary when the first symptoms occurred. These duties the Charity Organisation Society are endeavouring to fulfil. They have notified to the Secretaries of the London Hospitals their readiness to grant letters to out-patients for Convalescent Homes, and also give aid in the shape of money or food to deserving cases suffering from temporary sickness, and likely to receive permanent benefit from such relief. This scheme, if efficiently carried out, would strike a powerful blow at one of the most subtle causes of pauperism. Unfortunately the scheme at present is somewhat cumbersome in its working. The agents of the Society find out those who are sick and apparently in need of assistance, and then furnish the patient with a lengthy medical report containing nearly as many questions as for a life insurance office, and direct him to get this filled up by the physician of the hospital or dispensary at which he is attending. Now this mode of proceeding throws all the burden upon the already overworked out-patient staff of our hospitals. To fill up such a report conscientiously would take considerable time, and if the demand were frequently made, it would be utterly impossible to keep pace with the work. If therefore the system is to work smoothly and efficiently, a simpler plan must be adopted. In the case of benefit societies and sick clubs the mere signature of the physician of a hospital to a certificate stating that a man is unfit to follow his usual occupation is sufficient without any report. If the Society would therefore issue to the hospitals a simple form for the physician to sign, the system would work easily, and very little extra labour be thrown on the hospital authorities. A

note at the foot of the form might request the physician not to sign for chronic illness, but only when prompt relief, either in the form of rest, extra food, or removal to the country, would be likely to check the progress of the disease, and afford permanent benefit. Instead, too, of sending cases of their own selection to the hospital, it would be better to supply these forms to the physicians, with a statement as to the number of cases they were able to deal with. In this way the medical staff would be able to select cases which, in their judgment, would be most likely to benefit by the relief afforded. So long as the selection is in the hands of the Society, it must happen that unsuitable cases will be brought under notice, since it is utterly impossible for laymen to discriminate between various forms of disease. But whatever scheme be adopted, one thing is very clear, that the Socicy must not expect the already overworked and unpaid staff of a hospital to furnish them with exhaustive reports of the cases on which their advice is sought. No class of men are more disinterested in their service to the poor, or more ready to give their time and energies for their relief, than hospital medical officers, but this is no reason why they should not be treated with due consideration, and their work lightened in every possible way.

IT may possibly have occurred to some of our readers that we seem ever ready to find space in THE LANCET for communications on the subject of bacterial pathology, apparently without much regard to relativity of importance, or to any guiding principle. Such, however, is not the case. Our object is to assist in the accumulation of facts of all kinds bearing on the subject. When a vast heap of such disconnected items has been piled up, it will then be the fit task of superior genius to disentangle, unravel, and make clear this congeries of conflicting elements. Some time ago M. DE LACERDA read a communication before the Académie des Sciences on the parasites of yellow fever. This paper was referred to MM. CORNIL and BABES, who arrived at the opinion that what were described as organisms by M. DE LACERDA were nothing more than filaments of vegetal tissue or granules of pigment. More recently M. BABES has examined microscopically some sections of the liver and spleen removed immediately after death from the bodies of individuals dead of yellow fever. The preparations were made from portions of the organs preserved in strong alcohol, and stained with methyl violet B. It may be said *en passant* that the aniline dyes vary considerably according to many circumstances, hence the care that is taken in defining what staining fluid was used. In this case M. BABES means that obtained from the factory at Bâle. The hepatic cells were found to be swollen and filled with fatty granules, intermixed with particles of yellow pigment. Generally the nucleus was pale, sometimes shrunken, and irregularly but deeply coloured. The intralobular capillaries, filled with blood, contained in places small hyaline granules from 1 to 2 μ in size, and of steel-blue tint. An accumulation of round cells thickened the interlobular tissues. The capsule of Glisson was swollen in places, and converted into embryonic tissue. Dilatations of the interlobular capillaries were descried, containing in their interior a large number of curved filaments (bacilli) from ·6μ to ·8μ in thickness, and of a variable length. Bacteria were found in much greater numbers in the kidney than in the liver, and their distribution was perfectly characteristic. The fibrous capsule of the organ was thickened, and composed of small round cells at its deeper part. From this embryonal portion cone-shaped masses of similar structure were seen to penetrate into the cortical tissue of the kidney. But the glomeruli and epithelium of the tubules, as well as the connective tissue of the organ, were all affected. Apparently undoubted bacteria were only to be discovered *in* the dilated afferent vessels of the glomeruli. To sum up, it may be said that changes of inflammatory sort were perceived in the liver and spleen, associated with the presence of bacilli *in* the interlobular hepatic capillaries and *in* the afferent vessels of the renal glomeruli. The further details may be read in *La France Médicale* for Sept. 29th.

Annotations.

"Ne quid nimis."

MEDICAL TOPICS AT THE CHURCH CONGRESS.

THE Church Congress may be congratulated on the range of its subjects and the bold liberality with which it invited Professor Flower and others to state to the Congress the results of the latest scientific investigations and the bearing of them on questions of faith. The medical profession may be congratulated, too, on the fact that such able statements of the most modern science came from its members, and not less on the fact that these statements were accompanied by the most reverent confession of all that is essentia in ancient faith. The time is happily past, if, indeed, there ever was such a time, when medical men could be regarded as the champions of scepticism. The leading members of the profession have long been foremost in their respective districts in the defence of the faith and in the duties of practical Christianity. Prof. Flower's statement was admirable alike in its lucidity and its reverence; and Mr. Le Gros Clark did equally well in showing the still missing links in the chain of reasoning by which the decline of evolution is to be established, and the wonderful points of differentiation between man and the most anthropoid of his fellow creatures. By both speakers the miracle of creation was still left, and left, indeed, in a grander and more far-seeing form than before the theory of evolution had been formulated.

Many other subjects were boldly handled by the Congress. Several able papers were read on "Pauperism and Thrift," under the three heads of Friendly Societies, Almsgiving, and the Treatment of Workhouse Children. The Rev. W. L. Blackley, especially, did good service in exposing the unsatisfactory nature of most of the friendly societies, on which the working classes depend for any security from pauperism. It is satisfactory to see the clergymen of the country taking a critical view of such questions, and rising above that superficial view of charity which would make it consist in mere almsgiving and indiscriminate assistance of all that calls itself providence. There was one feature about the proceedings which had its disadvantage. Very important views were advanced, sometimes on both sides of a weighty question, and yet no definite opinion was arrived at. For example, the question of deaconesses, and the further question of their taking vows of celibacy. The propriety of their taking vows was argued by Canon Carter of Clewer. But the opposite view was advanced by overwhelming force in words quoted from Bishop Wilberforce by the Dean of Chester. While admitting the necessity for an order of women who will devote themselves to a religious life, we must protest against the system of securing this devotion by a vow, as against all reason and

religion too. Such service to be of any worth must be prompted by continuous religious feeling. The vow taken at an anterior period, and perhaps in a moment of excitement, can have no religious value in the future.

DISEASE AND PAUPERISM.

REPRESENTATIVES of parochial boards throughout Scotland have recently taken to the holding of public conferences for the purpose of discussing the various subjects connected with the administration of the Poor-law, the more evident causes of pauperism, and legislative reform in matters affecting the pauper class. Their first effort was too evidently prompted by parochial views, and showed an inclination to deal with matters about which they had apparently little information, as when they suggested that the Board of Lunacy for Scotland should be placed entirely under the Board of Supervision, if not dispensed with as unnecessary. At their meeting in Aberdeen the other day the subjects treated were of considerable public interest, and there was a freshness about the papers, especially those of Drs. Beveridge and Simpson, not often met with at such meetings. The usual threadbare discussions took place, but the figures given by the gentlemen named will, we hope, attract the attention they deserve. We have already shown, by the calculations made with regard to the Paris and smaller outbreaks of typhoid fever, how enormous is the pecuniary cost of such epidemics, alike to the affected families and to the ratepayers generally; and it is just possible that were the latter aspect of the question prominently and frequently brought forward, there would be less hesitation on the part of local authorities in adopting sanitary measures, even when attended by considerable cost. It is certain that in the long run such expenditure would be distinctly and directly economical. Dr. Beveridge, dealing with preventable disease as a cause of pauperism, showed how frequently a visit, and especially a fatal one, from a zymotic, or otherwise a preventable, disease, threw the whole family as a burden upon the ratepayers, and indicated how the adult mortality from these diseases might with certainty be lowered. It is too often the case that fevers alone are looked upon as within the scope of sanitary measures, and Dr. Beveridge did good service in pointing to the numerous deaths from tubercular diseases, and even those due to other diseases of the lungs, as in many cases quite avoidable if the sanitary surroundings, food, and clothing of the unfortunates had been other than they were. Remembering the age at which patients die of consumption and the adult mortality from the other diseases named, it is at once evident that we have here, by the removal of the breadwinners, or even by the prolonged illness of such, a serious pauperising influence. All this, although apparent enough to the profession, needs continual restatement to the public, and the figures used in the paper referred to were convincing enough for the dullest. It is only during the past five years that a regular sanitary staff has been organised in Aberdeen. The results were found to be as follows:—During the four years ending 1882 the average death-rate has been 20·15 per 1000; whereas during the four years immediately preceding 1875–78 the average death-rate was 21·27. But this does not express the full advantage gained. If the whole period be taken of which we have authentic records—viz., the twenty-three years from 1856 to 1878—the average is found to be 23·42. For the last four years, therefore, there has been an average yearly saving of life at the rate of 1·125 per 1000 as compared with the immediately preceding four years; or of 3·27 per 1000 as compared with the average of the preceding twenty-three years. This may be put in another way, by showing that there has been a saving of 327 lives per annum, when compared with the average of the twenty-three years ending with 1878. If we remember the large proportion of these deaths which must have occurred among the labouring classes, and if allowance be also made for the very large total of sickness represented by these deaths, we can but wonder that parochial authorities have not long since taken to heart the lesson now taught them, not for the first time. The statistics of Dr. Simpson had a similar lesson, as he was able to show that in the different parts of Aberdeen the death-rate varied from 30 per 1000 in one section to 16 per 1000 in the better part of the city. He reduced to figures the loss suffered by the community in respect of preventable diseases, whether ending in sickness or death, but the amount seems too considerable for acceptance by the general public. It will take many years of persistent effort before such calculations will be accepted as practical, but the evident duty of sanitarians is to press forward with such striking figures whenever occasion occurs.

THE HOWARD ASSOCIATION.

THE Howard Association, of which Mr. Tallack has so long been the *deus ex machinâ*, issues annually a Report, which is always interesting. It is a gratifying circumstance that this Association is year by year gaining credit with the Executive Government and influence with the people at large. It deserves to be warmly supported. At the present moment Mr. Tallack and his Committee have an especially useful enterprise in hand. They are trying to induce the judges to abandon the rule-of-thumb method of apportioning terms of penal servitude to offences, and to exercise a little discretion as to the length of the time for which they shall send each offender to imprisonment, the primary object of which is, or ought to be, his personal reform and reclamation. The judges sentence to five, seven, or ten years in a "ding-dong bell" fashion, when they might with advantage sentence to six, eight, or eleven years. "For convicts," say the authors of the last report, "the desideratum is sharper and shorter sentences, with unrelieved cell separation for all first offenders; and then for re-committed prisoners plenty of hard work on land, in the open air, in well classified parties." This seems to us a sound and practical formulation of the needs of the case, and one which ought to be taken very seriously into consideration by the powers that be.

UNIVERSITY COLLEGE, DUNDEE.

ON Friday, October 5th, one of the most important and interesting events in the annals of Dundee took place in the opening of the new college, which begins its life under the most promising auspices. Well endowed with suitable premises and all the modern appliances for the teaching of the subjects within the curriculum, with a staff of able, enthusiastic, and youthful professors we have here not only an important development of the modern system, which places technical education in the forefront, but excellent means of obtaining a high-class education in classical and modern subjects. As already mentioned in our columns, the College is due to a princely gift of £150,000 by the late Dr. Baxter and his sister, Miss Baxter, of Ellangowan; but with this sum completeness in special classes has been gained instead of attempts at a wider curriculum. It is hoped that other wealthy and generous citizens will eventually add to the capabilities of the College by aiding in the institution of other much-needed chairs, through which, gradually, another university may be added to Scotland. The ceremonies in connexion with the opening were of an elaborate character, but the grand feature of the event was the brilliant discourse by Professor Stuart, of Cambridge. The prominent thought throughout this inaugural address indicated the growth of teaching bodies in accordance with the needs of the times, and in this way he accounted for the

establishment of such a college as that at Dundee for the technical education of all classes having to do with manufactures and trade, just as the University of Bologna was established 800 years ago for the study of law. Strongly approving of this practical aim in university teaching, and accounting in this way for the eminent success of the Scottish universities as truly national institutions, meeting the wants not only of the higher culture, but of students for the various professions, he went on to show that the universities in England could only be attended by the privileged few, and that therefore these institutions did not mould the national character as was the case in Scotland. He urged the further development of the system, and would not have these institutions Anglicised. After lengthened reference to the time, place, and methods of technical education, the Professor went on to argue for a truly liberal education, using Dr. Whewell's definition, a "knowledge of something of everything, and of everything of something." We cannot follow Professor Stuart through the length of his polished address, but would recommend its leisurely perusal to all who wish to become acquainted with the noblest views of educational reformers. Principal Peterson, in looking to the future, hoped for additional chairs in Biology, Modern Languages and Literature, and Mental and Moral Science; "and if the conditions of medical teaching in our larger universities point, as some hold they do point, to the establishment of a new medical school for Scotland, few would have any doubt of the success of such a school if it was possible to plant it in this great and populous city." In the meantime their students could take advantage of the London University, and ere long some sort of affiliation with one of the Scottish universities might be accomplished. The classes are now open, and about 160 students are enrolled. Over 100 of these are for night classes.

CRIME IN ENGLAND.

MR. HOWARD VINCENT, who, as Director of Criminal Investigations, ought to be particularly well-informed on the subject, is of opinion that "during the last ten years there has been an undoubted diminution of serious crime," which he attributes "to the efforts of the Howard Association, the temperance movement, and home missions, board schools, reformatories, and industrial schools." "Compared with Paris, Berlin, and Vienna," Mr. Vincent tells us, "London is wonderfully free from murders, manslaughter, and robberies with violence." This is satisfactory. It would not necessarily be so of itself, because, as we have repeatedly pointed out, police estimates of crime are apt to be qualified by the efficiency of the force in the discovery and arrest of criminals. For example, it is always possible to control the total number of cases of "drunkenness," so far as the returns are concerned, by being more or less liberal in the construction put on inebriety. We remember one year, in a previous decade, when the number of offenders under this head was exceptionally low, and the police authorities indulged in a good deal of self-laudation, albeit the streets were unusually full of persons who could neither walk straight nor avoid offending the taste and judgment of the sober community. Mr. Vincent, however, explains that "in about sixty cases out of every hundred offenders are brought to justice." Of course Mr. Vincent is speaking of the "cases" which are officially known to himself. Meanwhile, it is not flattering to self to find that it costs the country £6,000,000 for England and Wales—not counting Scotland and Ireland—each year, to keep some 36,000,000 of people in order; and that notwithstanding this expenditure one in thirty-six of the population offends so as to be apprehended or summoned! It is true that three-fourths of the offences committed are "rather moral than criminal"; but if the machinery of the law costs rather more than three shillings a head for the whole population per annum, in addition to the great cost of moral influences exerted through religious bodies, of which the Church of England alone expends some £8,000,000 a year, our public propriety must manifestly be a somewhat expensive luxury. In round figures, what with moral and legal forces of coercion directly brought to bear with the intent of making us good and happy, it requires something like seven shillings a year to keep the population up to its present not particularly excellent standard. There is food for reflection in this, if we study the facts from the economic standpoint, in the light in which it was viewed by a noble lord who was sometime Chancellor of the Exchequer, and, while in office, was heard to say he would disestablish the Church to-morrow but that he should have to double the police rate.

CHOLERA IN EGYPT.

THE report of Dr. Dutrieux Bey, who recently spent a month in Lower Egypt studying cholera, has been published. The report gives a sad account of the loss of life from the malady in that part of the country, and the statement is made that for some months the disease had prevailed in that district, while Europe was ignorant of its proximity to her own coast. Dr. Dutrieux's sympathy for the fellaheen was much excited by the condition in which he found them, and he urges the necessity for Egypt to reform her social and political institutions; but he believes that the reform of her administrative and judicial systems must pave the way for other improvements. Comparing the mortality from cholera in Lower Egypt with that in Alexandria, he shows that while in one locality, among 16,000 inhabitants, 154 died on the most fatal day, in Alexandria only 50 persons died on any day out of a population of 200,000 persons, a result he attributes in part to the disinfection of the water by permanganate of potash. The report is written forcibly in order to bring to the knowledge of Sherif Pasha, President of the Council of Ministers, the condition of the people in Lower Egypt.

TEA-DRINKING.

THE Dean of Bangor lately took occasion to inveigh against what he terms the pernicious habit of tea-drinking. From a perusal of his remarks one would think that indulgence in "the cup that cheers but does not inebriate" lies at the foundation of many of the evils and vices that tend to enervate and degrade mankind. To our mind the conclusions of the learned Dean are drawn from insufficient premises, which in their turn can scarcely be regarded as scientific truths. To say that over-much tea-drinking acts as a dangerous revolutionary force amongst us is scarcely on all fours with the acknowledged high physical and mental standard of men of our own times. If we were to follow his argument to its logical end, we should not be surprised to find that the use—or abuse—of the popular beverage through so many years had by its debasing and destructive tendencies, in virtue of the process of natural selection, caused the tea-drinkers to go to the wall or set each man against his fellow, and brought Macaulay's New Zealander to contemplate the ruins of St. Paul's, or Campbell's last man to bewail the infatuation of his sacrificed ancestors. To fix the ills and misfortunes of race and individual upon one or other besetting fault, such as excessive tea-drinking, is as reasonable as to ascribe the brain-disease of a madman to his insane acts. We would not for a moment be held to countenance the abuse of what in moderation is undoubtedly a tranquilliser of the temper and a pleasant and harmless stimulant. Times enough we have directed attention to the injurious practice of taking strong tea to excess, and especially upon an empty stomach, and to the harmfulness of ingredients such as artificial colouring matter employed

for sordid gain. But there is a medium in all things, even in those where the worst is not very bad or the best very good. Hard-worked minds and fatigued bodies are often the better for some gentle stimulant that rouses into gentle activity the nerves which minister to animal life and comfort. Tea has its uses and abuses, like most other things; but we are inclined to think that the latter are an insignificant set-off to the former. Oatmeal and milk are excellent things, but they are scarcely fitted for the drawing-rooms of society; and society must have its pleasures as well as carry out its duties.

THE SISTERHOOD OF ST. JOHN'S HOUSE.

THE position of this sisterhood with regard to King's College Hospital remains in the same position as when we last referred to it. The committee of the hospital have decided to go on with their present arrangements with the Council of St. John's House, and the sisters who formerly nursed the wards have been obliged by the course of events to accept the situation. At Charing-cross Hospital, however, Mr. Few, the treasurer, has given notice to the Council of St. John's House that in six months from September 29th the authorities will determine their agreement with St. John's House. This is obviously the first step which Mr. Few can take in order to reinstate the former sisters, who without any real grievance, but to show their common sympathy with the sister-matron at King's College Hospital, resigned their posts and left the patients to be cared for as chance or good fortune might determine. As pointed out by Mr. Ernest Frere, in a letter to *The Times* of the 9th inst., this is merely Mr. Few's own act, done without the authority of the Council of Charing-cross Hospital, and cannot be accepted by the Council of St. John's House. We can hardly believe that the other members of the Council and the medical authorities will quietly give way to Mr. Few's wishes, and allow the nursing to be handed over to an irresponsible sisterhood, whose members may again leave on the slightest pretext and without warning. The managers are bound, in the interests of the patients, either to conduct their own nursing arrangements, or to ensure that the body to whom they may entrust them is not only able to undertake the work, but in the event of any difficulty arising, can be compelled to loyally carry out its part of the agreement. A voluntary collection of sisters, without any head but a lady superior of their own choice, does not seem to us to fulfil these conditions.

A MEDICAL CORONER FOR NORTH DEVON.

DR. SLADE-KING is asserting the claim of the medical profession to the office of coroner in North Devon. He says, "It must be apparent to those who have considered the subject that a want of scientific knowledge on the part of coroners places them at a serious disadvantage, and the opinion of the best authorities is that a candidate possessing medical and chemical qualifications is the proper man to investigate the cause of death." This has been abundantly demonstrated by experience. The function of the coroner, or crowner, is to inquire, of his own power and skill, into matters affecting the right of the Crown and the lives of the people. He has to go to the spot where the remains are found, to "view" them in the presence of *his* witnesses—that is to say, the "twelve neighbours" he "takes with him." It must be evident on this view of the matter that the crowner ought not to be a lawyer unskilled in the business of "inquest" for "the *cause* of death," however skilled he may be in legal function, but a man qualified by professional knowledge and skill for the *special* duty with which he is entrusted—in short, a medical man. We wish Dr. Slade-King success, not merely on professional grounds, but on those of common sense and public expediency.

HOSPITAL EXTENSION IN BIRMINGHAM: GIFT OF A SUBURBAN BRANCH.

A MOST satisfactory illustration of the public spirit and philanthropy that animate some leading citizens of this large Midland centre has lately been afforded to the General Hospital. At a meeting of the committee held on the 5th inst. a letter was read from Mr. Jaffray, proposing to build a suburban hospital, in connexion with the General Hospital, for the reception of chronic and non-contagious diseases, and to present it as a free gift to the governors in trust for the public. In this communication, couched in dignified terms, and expressed with characteristic clearness and vigour, Mr. Jaffray gracefully acknowledges his obligations to the community in which he has lived so long, and displays a familiar acquaintance with the details of hospital management and requirements, and, we may add, a just and generous appreciation of the manner of dealing with them. He stated that a freehold site within easy distance of the town had been secured, and plans prepared for a building capable of accommodating fifty male and female patients, with the requisite offices for attendants and servants, arranged in such a manner that an addition can be made at any future time. The committee, in accepting this munificent gift, the cost of which will probably be not less than £20,000 to £25,000, are sensible of the necessary expenditure incurred by the maintenance of such a building, the estimated annual expenses being £2500 a year, and they propose to consider the question of endowment at a meeting of the governors called for Nov. 7th. Already the enthusiasm has spread, and the solution, in some measure, of this difficulty has been very happily suggested by Mr. Wiggin, M.P., by a contribution of £1000 as a starting point. Three other well-known gentlemen have generously given another £1000 each, and there is reason to believe there will be a liberal response to the appeal on behalf of this deservedly popular and well-managed institution. The prospective benefit arising from this scheme is so manifest as scarcely to need pointing out. All who are conversant with the affairs of large hospitals will call to mind the obstacle to active and continuous work entailed by the retention of chronic cases, and the undue strain upon the resources where the stay of patients is protracted over a certain length of time. In a manufacturing town, where accidents are numerous and space valuable and important, it will be of the greatest possible service to draft the more tedious cases to an outside building under the auspices of the parent institution. The advantages to be gained by fresh air and country surroundings will tend in a material degree to favour convalescence, and to give restorative aid in the treatment and conduct of a large proportion of cases which otherwise often drag on as a burden and obstruction to their more urgent fellow-sufferers. It is to be hoped that this example will be found worthy of imitation as a fresh departure in the difficult question of dealing with convalescent and lingering cases in the crowded wards of large hospitals.

RABBITS IN AUSTRALIA.

IT would appear that the sheep farmers of Australia are much concerned to know what to do to rid themselves of a perennial nuisance in the guise of rabbits. An ingenious but not too scientific veterinary surgeon has thought of the practicability of inoculating some rabbits with tuberculous material, so that the animals operated upon may not only be destroyed, but also become the centres of infection for the destruction of the rest of the dwellers in rabbit holes. The idea does not seem to have commended itself to the Australian press—far from it. Those who believe, says the *Evening Standard*, that "blackbirding," is a pastime approved by our Australian brothers should read the outcry it has evoked. Surely there is a question whether the pro-

posed infection could be actually carried out. No doubt rabbits are peculiarly liable to become tubercular, but the certainty of contagion through the medium of the atmosphere is not conclusively established even for them. Admitting the possibility of the infection of the whole community of rabbits in the manner suggested, there is another consideration besides the cruelty of it. To disseminate tuberculosis broadcast over the country would be an act much like cursing, as the Arab proverb describes that exercise. The germs would surely "go home to roost" in the operator's family.

THE PROPOSED LANDING-STAGE FOR FEVER HOSPITAL SHIPS.

AT a meeting of the Rotherhithe Vestry on Oct. 2nd, it was resolved to memorialise the Local Government Board against the proposal of the Metropolitan Asylums Board to use a wharf in Trinity-street for the transfer of patients to and from the metropolis and the floating hospital at Long Reach. The question was argued in the usual way: the inhabitants were in a state of alarm; the value of property would be depreciated; it was unjust for Rotherhithe to have to receive infectious cases from the west and north of London. Rotherhithe may be consoled by the fact that, whatever risk may be incurred by the introduction of small-pox cases into a neighbourhood, there is not a particle of evidence that persons suffering from any of the fevers other than small-pox can convey the disease to a neighbourhood provided proper precautions be taken. The inquiries by Dr. Thorne Thorne into circumstances connected with hospitals for infectious diseases in the provinces, and by Mr. Shirley Murphy into the influence of the London Fever Hospital on the surrounding neighbourhood, afford sufficient ground for distinguishing between the behaviour of fever and small-pox in this respect. Rotherhithe should also remember that convalescents from small-pox are shown by Mr. Power to be less capable of infecting a neighbourhood than those in the acute state of the disease, and that even these only become a source of danger when they are congregated together in sufficient numbers. The outcry, then, against the use of a wharf for the shipment of convalescents is one that deserves no sympathy, and we trust the Metropolitan Asylums Board will not be hindered from the performance of an important duty by the effort which is being made to stir up public feeling against their action.

PHILADELPHIA POLYCLINIC.

UNDER this name an institution has been organised in Philadelphia for the purpose of giving instruction in the so-called medical and surgical "specialties" to qualified medical practitioners. The courses of study are entirely clinical and demonstrative, and are of six weeks' duration each, and a ticket can be taken out at any time for the ensuing term of six weeks. We have no doubt that by this means many will be able to supplement to great advantage their short term of study before graduation. In New York a somewhat similar institution, called the Post-Graduate School of Medicine, has been recently established, and many well-known "specialists" are connected with it.

AN INFANT SUFFOCATED BY A CAT.

THE old superstition, that cats cause the death of sleeping infants by withdrawing the breath from their lungs was no doubt a false interpretation of circumstances. There are many explanations of the occurrence, which, stated as a matter of simple facts, comes to this: A child is found dead from asphyxia, with some fur in its hands and a cat by its side. Now, it is quite possible that the infant succumbed to an attack, say, of false croup attended with convulsions, in the course of which the cat happened to be near and was seized by the dying babe during its clonic spasms. In this case the puss may be regarded as not only not to blame, but as somewhat ill used by the infant. On the other hand, the animal may have viciously or unintentionally been the cause of the child's death, either by grasping its throat or blocking its mouth and nose. It may be that the kitten was playing and pulled the sheet or some article of clothing over the face, and so have arrested respiration. A dormant babe has not much strength and very little sense on being suddenly aroused from sleep, and so the catastrophe is not difficult to understand. Fright also may be an important element in determining the fatal issue, either by depriving the child of what little consciousness it might have, or rendering its little strength still less. The moral is, however, in all instances the same: never to leave an infant in a room with the door ajar, window open, chimney free, or a cat therein, unless guarded by a careful attendant.

THE SUPPLY OF SUBJECTS.

THE various metropolitan schools are better supplied with subjects than for several past years, and there is a notable improvement on last year's supply. The distribution and payment, with the co-operation of the Inspector of Anatomy, is now arranged by a committee of the teachers of all the schools, with the exception of the London Hospital, where the authorities have hitherto declined to join in the arrangement. By this plan every school receives subjects in proportion to the number of pupils actually dissecting, and in its proper turn, so that the heart-burnings and jealousies which formerly existed have been removed. Moreover, any question that may arise can be much better dealt with by a centralised body than it could when every school followed its own line of action. Anatomical students and teachers are much indebted to Mr. Henry Morris, to whose energy the scheme owes its origin, and to Professor Thane, Mr. Howard Marsh, and Mr. Davies-Colley as a committee, to whose exertions the satisfactory character of the first year's work is entirely due. The examining bodies have co-operated in every way with the Anatomical Committee, and facilitated its operations.

DEATH IN THE BATH.

THE discovery of the dead body of a woman in a bath at Brighton will serve to direct attention to a matter of common precaution which ought not to be neglected. All baths should be so constructed that the supply of hot and cold water is necessarily alternate, the cold water coming first. A very simple mechanical arrangement would suffice to attain this object, and if secured in every case of bath service there could not possibly be such "accidents" from excessive heat as now occur at public institutions and even in private houses.

FERMENT IN WHEAT.

WE think it may be asserted with much truth that nothing exists which does not possess in its immediate neighbourhood some agent or condition, often of a special nature, which is capable of effecting some remarkable alteration in its constitution. This proposition will be found to hold true more particularly in those bodies which are chemically unstable, and therefore chiefly in organic compounds the products or parts of vital tissues. In a memoir dealing with the conditions which induce changes in wheat flour, M. Balland states that wheat grain contains a ferment which resides in the neighbourhood of the albumen, and the action of which is apparently confined to the gluten. The

ferment behaves like an organised one, resists a dry heat of 100°C., but is rendered inactive by boiling water. Heat and moisture are necessary for its development. A temperature of 25°C., with plenty of moisture, is especially conducive to its growth. In grinding the corn the ferment remains with the bran if the operation be skilfully conducted. But if the grinding stones be rotated too quickly, the greater part of the ferment goes off with the flour and gives rise to certain changes, to which the term "heated" has been applied.

POISONOUS PAINTS.

THE report of a committee appointed to consider the question of poisoning by the use of lead paints was presented to the Council of the Sanitary Institute at the congress recently held at Glasgow. The report stated that the composition and properties of three non-poisonous white paints and their driers had been investigated. The paints were practically free from lead, but two out of the three driers supplied with them contained lead in large quantities. Special attention is called to the fact; for although, according to the directions of the makers, the driers should be used in the proportion of only about 7 or 8 per cent., they are in practice mixed with the paints to a very much greater extent; and consequently the paint, when prepared for use with driers containing lead, becomes a poisonous paint. In a trial of their merits for decorative purposes, the sample in which neither paint nor drier contained lead proved superior to the other two. The experiments were not continued long enough to allow of a report upon the durability of the samples.

LONDON WATER-SUPPLY.

AT the last ordinary meeting of the Metropolitan Board of Works a resolution to the effect that a committee should consider and report upon the desirability of applying to Parliament in the next session for power to prepare and submit to the Legislature a scheme for dealing with the water-supply of the metropolis was carried unanimously. In the course of the debate, in which several members of the Board took part, it was stated that at the present time the board were not able to spend a single shilling to deal with the water-supply of the metropolis, unless Parliament should give them power to do so, and that within a few years the assessment of the metropolitan companies had been increased from £800,000 to upwards of £3,000,000, while the supply of water had very considerably decreased.

THE GERMAN PHARMACOPŒIA.

THE German Apothecaries' Society held its annual congress recently at Wiesbaden, and devoted special attention to various matters affecting the position and training of students for that calling. It was also resolved that a commission, selected from the members, should revise the "Pharmacopœia Germanica, Editio II." A collection illustrating the history of pharmaceutical science will be established under the auspices of the Society in the German National Museum at Nuremberg.

THE CONTAGIOUS DISEASES ACTS.

SINCE the prorogation of Parliament rumours have been constantly heard in naval and military circles that some arrangements are under consideration by which the beneficial effects of these Acts may be retained. The dismay caused by the increase of venereal cases in the garrison towns under the Acts may well lead to some improvement on the present plan of practical non-interference. Prostitution and juvenile immorality have sadly increased, and the inhabitants of the subjected districts are quite alarmed at the condition of many of their streets after nightfall. Women, unless in a very diseased condition and unable to continue their traffic, do not present themselves at the hospitals, and hence venereal diseases are spread broadcast. The virulence of the malady in some towns recalls the features of the disease in a former generation. The number of diseased sailors in the naval hospitals has greatly increased, and the commanders of men-of-war have (according to a daily contemporary) deemed it expedient to parade their ship's company and read them the article which provides severe punishment, after trial by court-martial, for those who do not make the surgeon acquainted with the fact that they have contracted disease. Mr. Stansfeld and his supporters will perhaps by and bye come to learn what syphilis and its consequences really mean.

ALCOHOL AND TOBACCO IN LUNATIC ASYLUMS.

IF anything could exceed the cruelty of the policy which would deprive the aged poor of their beer and tobacco when reduced to accept the hospitality (!) of the workhouse, it would be that of robbing the insane of almost the last comforts left to them. These poor creatures are shut out from their kind, sex separated from sex, in defiance of all the laws of nature, and doomed to lives of unutterable loneliness; and now, forsooth, the goody-goody sentimentalists of the day must strive to cut off their very limited supplies of tobacco and beer. Better by far poison the poor creatures at once. We have no patience to write seriously of the newest and, in a very practical sense, the worst phase of philosophic inhumanity. The supply of stimulants and tobacco to the inmates of asylums is entirely a question for the medical officers in charge of these poor folk, and to these gentlemen—from whom the lunatic population will, we hope, receive a little consideration—it should be left.

WESTMINSTER HOSPITAL.

WE are informed that, at a special meeting of the Governors of Westminster Hospital, held on Sept. 25th, the final arrangements were made for the completion of the purchase of a piece of ground within a few minutes' walk of the hospital, upon which, we believe, it is intended to erect a medical school, a step that is necessitated by the large increase in the number of students that has taken place within the past few years. The available space within the precincts of the hospital which will be thus liberated is to be devoted to the much-needed improvement and extension of the out-patient department.

EXPERIMENTAL SCIENCE.

THE Royal Italian Scientific Institute at Florence has organised a prize competition for the best work on the importance of experimental methods to science in general. The treatment of the question is intended to be twofold, the theoretical and practical application of the principle under discussion being dealt with in two divisions of the subject. The time for sending in essays expires on Oct. 31st, 1884, and the works submitted may be written in Italian or Latin. The secretary of the above-named institute will receive them, the address being "Via degli Alfani, 35, Florence." The prize is said to be £200.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the first meeting of the new session on Tuesday, October 23rd, an address containing an account of his labours in reference to the physiology and pathology of the nervous system will be delivered by Dr. Ferrier, who at the annual meeting in March last received the Marshall Hall Prize, which was awarded to him by the Society.

WE have received the second number of the first volume of the journal published by the Medico-legal Society of New York. It consists of 288 pages, and in giving a general survey of the various departments of forensic medicine it supplies a want which has long been felt. The first article contains an analysis of the proposed law relating to the legal forms concerning the confinement and treatment of insane persons. The papers on "Lunacy Reform" and "Insanity as a Defence for Crime" are treated with masterly and scholarly precision, and are well worth careful perusal. A number of editorial notes and a report of the transactions of societies, home and foreign, together with several miscellaneous annotations, help to complete the number. The type is excellent.

A SCHEME for the prevention of the spread of small-pox has been adopted by the *employés* at Messrs. Tangye's works at Birmingham which is worthy of imitation. A tax varying in proportion to the wages received, from a halfpenny to twopence per week, is levied on all *employés*, and this constitutes a fund in the hands of a representative committee. When a medical certificate is produced to the effect that any workman is attacked by, or comes from a house infected with, small-pox, his wages are sent to him in a registered letter, and he is required to isolate himself until pronounced free from all danger of conveying the infection. The inducement to conceal the fact of the disease owing to fear of the loss of the regular income is thus done away with.

THE sanitary inspectors—erstwhile denominated inspectors of nuisances—are apparently seeking to magnify their office. At a meeting of their association last week in Holborn the chairman, Mr. Jerram, is stated to have objected to the arrangement whereby the sanitary inspector is compelled to report to the medical officer of health. He thought the report should be presented at once to the sanitary authority. This alteration he advocated on the ground that the medical officer, while conversant with the laws of health, was not to be expected to be acquainted with the nature of sanitary evils like a trained inspector. Indeed!

A CASE illustrating the great inconvenience, to say the least, attending the present uncertainty as to the test of pure milk was heard last week in Manchester. The case was an appeal by a farmer who in May last was fined for selling milk which, according to the city analyst, who adopted the Wanklyn process, contained 4 per cent. of water. The authorities at Somerset House, however, reporting on a sample of the same milk sent to them, affirmed that it was not adulterated. In the end the Recorder, before whom the case was tried, allowed the appeal, with costs.

THE celebration of the one hundredth anniversary of the establishment of the Medical School of Harvard University and the dedication of its new building is announced to take place on the 17th inst. After an address by President Eliot, an oration will be given by Dr. Oliver Wendell Holmes, to be followed by the presentation of a portrait of Prof. Holmes and a bust of Prof. H. J. Bigelow.

NEWS from the Central Provinces of India states that Mr. Jackson, civil surgeon of Pachmarree, while out tiger-shooting with a friend, was attacked by hornets, and received over two hundred stings. Erysipelas set in and proved fatal.

DR. TOMSA of Kiew has been appointed Professor of Physiology at Prague.

IN a letter written to M. Emile de Laveleye, the president of the congress recently held at the Hague by the British and Continental Federation for the Abolition of the State Regulation of Prostitution, Mr. Stansfeld, M.P., states that it is the intention of himself and of those who think with him on this subject, "by persuasion, by encouragement, and by pressure," to endeavour to secure the introduction by Her Majesty's Government on the first day of next session of a Bill intended to be in accordance with the resolution of the House of Commons of the 20th of April last.

AT a meeting of the Health Section of the Social Science Association, on the 8th inst., Dr. Norman Kerr, by special request, opened a discussion on the subject of Legislation for Drunkards. At the termination of the debate a resolution was carried by a large majority recommending the council to impress on the Legislature the importance of removing the present hindrances to voluntary admission of dipsomaniacs into retreats, and also of conferring upon magistrates, in certain well marked cases, the power to commit such persons to these retreats.

DR. HAUGHEY of Crewe, who, as we stated in our last issue, received serious injuries on the 2nd inst., by being thrown from his carriage, owing to the horse having taken fright, died on the 4th inst., never having regained consciousness since the accident. Dr. Haughey was the medical officer for the Crewe District under the Nantwich Board of Guardians, and was very popular in the town in which he resided. An inquest was held on the 6th inst., and a verdict of accidental death was returned.

THE Vestry of St. Pancras have just issued to every householder in the parish a valuable and concise code of "Precautions against Disease." It is printed on a card, and gives precise and very intelligible directions as to "dampness," "dirt," "cisterns," "waterclosets," "house drains," "sink and bath wastes," "dustbins," "diarrhœal diseases," "infectious diseases," "disinfection," "disinfectants," and "patients and their attendants."

ON the arrival of the ship *Simla* from Calcutta at Dundee on the 10th inst., on board which, since leaving India, there had been four cases of cholera, the Customs Department granted a clean bill of health, and the vessel came into dock. The medical officer of health, however, on visiting her, issued a certificate that she was infected, and she was consequently removed from the harbour to the quarantine station.

AN excellent magazine for cyclists is the *Wheelman*, published by the Wheelman Company, Boston, Mass., the first number of vol. iii. of which has come to hand. Amongst a variety of entertaining matter is an article by Dr. G. Hull on "Physicians and the Bicycle," and another by Dr. W. Thornton Parker, headed "A New Remedy"—which, it is hardly needful to say, is the steel and rubber steed.

MR. THOMAS EVANS, one of the oldest practitioners in South Wales, died suddenly on the 8th inst., at Penarth, whilst congratulating a patient on her progress to recovery. Deceased was sixty-nine years of age and in 1868 was mayor of Cardiff.

PROFESSOR ZEISSE of Vienna, Physician to the General Hospital, has been raised to the rank of nobility, upon the occasion of his retirement from active work. He has made many contributions to syphilology.

ON Tuesday the deputation appointed by the Vestry of Paddington, consisting of Mr. Parker Young, Dr. Danford Thomas, Colonel Barchard, C.B., and Mr. Lilley, accompanied by the vestry clerk, attended at the offices of the Grand Junction Canal Company, with reference to the insanitary condition of the canal basin. The Hon. Mr. Browne, the chairman of the company, promised on behalf of the directors present to use all available means to minimise the nuisance complained of, but gave little hope, on the grounds of expense and interference with traffic, that the suggestions made by the deputation would be carried out.

THE ST. PANCRAS EPIDEMIC OF ENTERIC FEVER.

MR. SHIRLEY MURPHY'S REPORT.

WITH commendable promptitude and despatch, the Medical Officer of Health to St. Pancras has submitted to the Vestry an exhaustive and able report upon the recent epidemic of enteric fever in that densely populated district. The report, which consists of an octavo pamphlet of over twenty pages, and is illustrated with maps and plans, furnishes in a very convincing way the evidence which places this outbreak also upon the list of milk epidemics—a list which year by year is receiving fresh additions. Although the inquiry has failed at present in establishing the precise origin of the epidemic, it conclusively proves that the milk-supply from one source was infected, and that this quite sufficiently accounts for the outbreak in London. In what manner the farm came to be infected remains undetermined, although a sufficient cause for the conveyance of the virus to the milk is established—as in nearly every instance of milk typhoid—by the proximity of a well supplying the water with which the cans were washed to a cesspit and privy on the farm premises. The manner in which Mr. Murphy arrives at this conclusion is admirable—tracing the history of the epidemic backwards from the infected houses in the district, and showing how large a proportion occurred amongst the consumers of the milk supplied by this vendor, and particularly those who drank the milk from this particular farm. The plan pursued is so logical and methodical that no doubt can remain as to the inferences deduced from the data collected.

The epidemic has been a severe one, there having been 62 deaths out of 431 cases; and in this respect, as in the larger number of cases, it contrasts with the Marylebone epidemic of 1873, when 244 people were attacked, with a mortality of 26 In its other features this epidemic strikingly resembles that which occurred in Marylebone, particularly in its origin and mode of dissemination; and the result of the inquiry in each instance has been to trace the source of the disease to infection of milk-cans by the use of water for washing them from a contaminated source.

The report opens with an estimation of the number of deaths from enteric fever in St. Pancras in each week of July, August, and September during the past ten years, making due allowance for those residents of the parish who were removed to hospitals beyond the limit of the district, and for those resident in other districts who were brought into hospitals in St. Pancras. Assuming, then, the mortality from the disease to be 10 per cent. (an admittedly low estimate), the estimated average prevalence of enteric fever would be "in the four weeks of July, 26·4, or in the thirty-one days about 30 cases; in the four weeks of August, 38·5, or, in the thirty-one days, roughly from 40 to 45 cases; and in the six weeks, consisting of the last week in July, the whole of August, and the first week of September, about 50 cases."

In the present year no noticeable increased prevalence of enteric fever occurred "until about July 28th, when three houses were invaded, and six persons simultaneously attacked. These houses were situated in North- and South-villas and in Camden-park-road." From that date until Sept. 8th fresh cases of invasion of households were noted, showing so unusual a prevalence as to make it plain that some other cause was at work than local sanitary conditions. A map of the affected area is given, which indicates the situation of the houses attacked, the larger proportion being within a quarter of a mile of the "Britannia," High-street, Camden-town, more particularly to the north of the Cobden Statue than to the south of that point. Although these houses are remotely surrounded on three sides by the Regent's Canal, the houses attacked are not especially those on the canal's banks. Nor was the disease limited to the distribution of any water-supply, houses attacked receiving water from the mains of the New River and West Middlesex Companies. Again, the condition of the houses attacked showed no peculiarities; they were, as a rule, not inhabited by the very poor, but in many instances by persons paying comparatively large rentals. "In some cases sanitary defects have been found to exist coincidently with the disease; but these defects have not been peculiar to the invaded houses, nor is it possible to attribute a sudden outbreak such as has occurred to any such condition. Whatever is responsible for the disease is a cause affecting in common the houses that have been attacked, and differing from those that have escaped."

Mr. Murphy then details how early in the epidemic a clue was given to such a common cause by the observations of Drs. Fletcher and Albert Buchanan that a number of their patients suffering from enteric fever received milk from the same vendor, a suspicion of the mode of origin of the epidemic that was apparently strengthened on inquiry amongst other medical men. Accordingly, at the instance of Mr. Stott, who was acting medical officer of health in Mr. Murphy's absence, the vendor in question stopped his supply from all sources except Enfield, pending sanitary inspection of the farms by Dr. E. Squire. The result of this inquiry was to stop the supplies from one farm (at Elstree) where the water-supply was unsatisfactory; no grounds, however, being established to justify such steps in regard to the other farms (Rutland, St. Albans, and Coventry), the milk was again obtained from them as before. On Mr. Murphy's return, owing to the continued increase of enteric fever and to further evidence of the milk-supply being responsible, he requested the vendor to draw his supply from other than the usual farms, and no milk has been taken from them since September 4th.

The inquiry which was now undertaken was a very thorough one. It was ascertained that from July 28th to Sept. 8th there were 431 cases of typhoid in 276 houses. Of the sufferers 220 were customers of Mr. X., milk vendor in High-street, Camden-town; 130 sent for milk from Mr. X., or received it at their places of business, or consumed it in his shop; and 18 were customers of Mr. Y., who draws his supply from Mr. X.; leaving 63 who were not definitely known to have dealt either with Mr. X. or Mr. Y., but who might conceivably have partaken of the infected milk without knowing its source, as at coffee-houses, confectioners supplied by Mr. X., and in other ways. Of the 276 houses invaded, 131 were on Mr. X.'s list of customers; in 71 the affected inmates partook of the milk at their place of business; 14 received Mr. Y.'s milk. Mr. X. supplied milk to 928 houses, in 131 of which the fever appeared, or 14·1 per cent. Supposing the same ratio to hold for the whole district (with 24,655 houses), the number of houses attacked should have been 3475, instead of 276. Again, in the Regent's-park sub-district, where the greatest proportion of cases occurred, Mr. X. supplied 344 houses, of which 40 were attacked, or 11·6 per cent. If the other houses had suffered in the same ratio, there should have been 507 houses in this district with enteric fever. The deaths from the fever point to the same conclusion, that a portion of Mr. X.'s milk-supply was contaminated; for of 62 deaths, 26 were of people on Mr. X.'s list, 18 were amongst those who partook of Mr. X.'s milk at

their places of business or elsewhere, and 4 received their milk from Mr. Y. Again, of 73 cases admitted into hospitals, 30 were on Mr. X.'s list, 29 received his milk elsewhere, and and one was on Mr. Y.'s list. These figures speak for themselves, and their significance is well brought out in a table in the report. A house-to-house inspection was made in certain streets, with very striking results. Thus in one district there were 235 houses supplied by other milk vendors and 72 by Mr. X. In the former there were no cases of enteric fever; in the latter, 15 houses and 28 persons were attacked. In Torbay-street, 34 houses were supplied by other milk vendors, 8 by Mr. X.; in the former but one case of enteric fever was found (that of a man who at his place of business in High-street drank Mr. X.'s milk); of the latter, 5 houses were invaded and 11 persons were attacked. Similar equally striking facts came out in other districts; and it often happened that when only one member of a family was attacked that person had drunk Mr. X.'s milk elsewhere. Of 25 female clerks in the Chalk Farm Goods Station of the L.N.W.R., 12 were in the habit of drinking milk at Mr. X.'s shop; 4 of them had well-marked enteric fever, and 2 others symptoms of a mild attack; of those who did not drink the milk all escaped. "In a house of business there were 17 people, 7 of whom drank beer, while 10 drank Mr. X.'s milk instead. Of the beer drinkers, all escaped; of the milk drinkers, 7 were attacked."

The reason why even more disastrous results did not ensue is to be found in the fact that only a certain proportion of the milk supplied by this vendor was possessed of the noxious properties, and the inquiry had therefore to be directed to ascertain how and when the milk became so contaminated. In the place of business of Mr. X., out of the twenty-one persons employed eight fell ill with enteric fever from August 1st to 19th, but as no cases occurred previous to the outbreak the above cases were undoubtedly the result, and not the cause, of the milk infection. Mr. Murphy found the premises well arranged and in good sanitary condition, and was satisfied that there was no reason to suspect this place of business as being the source of the contamination. It must therefore lie further, and the next question was to inquire into the condition of the farms whence Mr. X. derives his supplies of milk. These are five in number:—Eighty-four gallons came daily from a farm in Rutland, twenty gallons from one at Enfield, sixteen gallons from Coventry, sixteen gallons from St. Albans, and thirteen gallons from Elstree. The St. Albans milk was placed in separate cans for special purposes; it was this which was sold over the counter, and as it was customary after the milk-carriers came in from their rounds to mix the various milks together some of the St. Albans supply became mixed with that from other sources. Some houses had only the St. Albans milk, and such was the case with Mr. Y.'s customers. That this particular supply was the one at fault became very evident when it was found that those who "drank least of the St. Albans milk suffered least; those to whom it was supplied separately, but who also had other milk, suffered at about twice the rate of those who received the smaller quantity, while those who through Mr. Y. had no other milk than the St. Albans suffered half as heavily again as the last."

The occurrence of cases amongst the railway officials at Kentish Town who partook of the St. Albans milk, and the immunity of those at St. Pancras Station who partook of the Rutland supply, formed another very remarkable link in the chain of evidence. And a careful inspection of the property at St. Albans, where a few cases of enteric fever have occurred coincidently with the St. Pancras epidemic, showed that on the dairy-farm there is a brick cesspit located about 20ft. from a well, the cesspit being 2½ft. in depth and the well 80ft. The soil is gravel and clay upon chalk, and there is great reason to believe that the water in this well had become contaminated by percolation from the cesspit. An experiment made to test this surmise, by placing some chloride of sodium in the cesspit, yielded a negative result. Moreover, how the cesspit or the well water (with which the milk cans were washed) became infected with the typhoid poison is yet unknown. Information is still being sought as to the health of the people who came to the farm during the months of June, July, and August, so that it is quite possible this final link may yet be established. A boy who came to the farm on July 6th sickened with enteric fever eight days after his arrival, and one of the farmer's sons suffered from diarrhœa, feverishness, and pneumonia on August 6th. The fact that none of the other residents and *employés* were attacked is explained by the circumstance that the use of the milk was almost limited to the members of the household, all but three of whom were protected by having had previous attacks.

The facts thus carefully collated show, according to Mr. Murphy:—

1. A special incidence of disease upon Mr. X.'s milk practically accounting for all but the average number of cases which usually occur in St. Pancras at this period of this year.

2. A still greater incidence upon the milk coming from one farm (St. Albans).

3. The fact that the milk was infective before its arrival at Mr. X.'s premises, as proved by the outbreak among the porters at the Kentish-town Station.

4. That the milk came from one of three farms on the Midland Railway, as shown by the illness of the Midland officials.

5. That one of these three farms could be eliminated from suspicion, owing to the milk having been used elsewhere without harm.

6. That an outbreak among the drinkers of milk from one of the remaining farms occurred at the city of St. Albans.

7. That enteric fever was found amongst the residents on the farm itself.

Mr. Murphy was able to assure the vestry that the cause of the St. Pancras epidemic was at an end; and he closed his report with some judicious remarks upon the means of prophylaxis in these epidemics of infectious disease due to milk contamination; urging especially the desirability of the consumer adopting the precaution of boiling milk to destroy any infectious property it may possess. He also points out the importance of the medical officer of health being informed of any case of infectious disease when it occurs as the surest means for detecting and arresting the further extension of an outbreak like this; and he has little doubt that the action taken by some medical men in the district prevented a still greater calamity than that which has been the subject of his report.

THE FINAL REPORT OF

THE ANTHROPOMETRIC COMMITTEE OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

No. I.

THE Report which was presented at the meeting held at Southport last week, contains much information of great value and interest to medical men, as it may be considered as an approximate census of the physical condition of the population of the British Isles. It has been drawn up by Mr. Charles Roberts, who has devoted much attention to anthropometric inquiries; and Sir Rawson Rawson, whose position as Vice-President of the Statistical Society should be a guarantee for the accuracy of the statistical tables; and Dr. Beddoe, whose position as an anthropologist is well-known, has been consulted on questions relative to the racial origin and distribution of the people. The other medical members of the committee were Dr. T. G. Balfour, Inspector-General Lawson, Dr. Mahomed, and Dr. William Ogle. The late Dr. Wm. Farr took an active part in the formation of the committee, and was its chairman for the first four years of its existence. A large portion of the statistical data was collected by medical men in various parts of the country, and these will be glad to learn that their joint labours have produced useful results. The committee was appointed in 1875 for the purpose of collecting observations on the physical characters of the inhabitants of the British Isles, and has made five interim reports which contain a large amount of statistical matter which is not included in the present report. The points to which the committee has addressed its inquiries are: stature, weight, chest-girth, complexion as indicated by the colour of the eyes and the hair, breathing capacity, strength of arm, sight, and span of arms; some observations on the circumference of the head, arm, and leg have also been received. The observations on breathing capacity were

early abandoned, on account of the imperfection of the apparatus, and the observations on sight were dealt with in a previous report. The large body of observations on stature, weight, and complexion collected by Dr. Beddoe, and those on stature, weight, and chest-girth collected by Mr. Roberts, previously to the formation of the committee, have been made use of, and the committee has thus had observations made on a total number of about 53,000 individuals of both sexes and of all ages, from which to construct their tables and to base their conclusions. The statistics are unique in range and numbers, and have been obtained from a very large number of independent observers living in different parts of the country, without prejudice, and often in ignorance of the use which would be made of them, and they have been analysed and tabulated in a perfectly impartial manner, irrespective of all preconceived opinions. Great care has been taken in the examination and classification of all the returns to eliminate obvious errors, and to call attention in the body of the report to any apparent discrepancies from faulty observation or deficient numbers. In dealing with these observations the first object of the committee has been to ascertain the principal characteristics of the adult population: — (1) As to the stature, weight, chest-girth, and strength of men of the whole country, and of each of its four provinces; (2) the relative stature, weight, and strength of men and women; (3) the stature, weight, and complexion (colour of eyes and hair) of men in different countries, as indicating their racial origin, and the influence of soil, climate, occupation, and other sanitary surroundings; (4) the relative stature of men of British origin, and that of other nationalities and races, as far as they have been ascertained. Its second object has been to ascertain the rate of growth and development of children of both sexes under different conditions of life (media), the period of the attainment of maturity, and the influence of advancing age on the physical condition of the body.

Table I. contains all the data collected relative to the stature, weight, chest-girth, and strength of 8585 men between the ages of twenty-three and fifty years, arranged according to their birthplace in each of the four provinces. The Irish returns are almost entirely those of men born in Ireland, but living in other parts of the kingdom, and in this and in all other respects are too few in number to be fully relied on. The general results indicated by this table may be summarised as follows:—In height the Scotch stand first (68·71 in.), the Irish second (67·90 in.), the English third (67·36 in.), and the Welsh last (66·66 in.), the average of the whole being 67·66 in. In weight the Scotch take the first place (165·3 lb.), the Welsh the second (158·3 lb.), the English the third (155·0 lb.), and the Irish the fourth (154·1 lb.), the average weight of the whole being 158·2 lb. Thus the Scotch are the tallest and heaviest, the English take the third place in both tables, while the position of the Welsh and Irish is reversed—the Irish, occupying the second place in stature, come last in weight, and the Welsh, though lowest in stature, stand second in weight. The columns showing the number of men per thousand at each height, besides showing in a uniform manner the relative stature and weight of the different nationalities, will be useful to military surgeons for determining the minimum stature of recruits for the army, no tables of a similar kind having been published in this country. From the run of the figures it is obvious that the minimum standard for Welsh recruits should be two inches lower, and for English and Irish recruits one inch lower, than for Scotch recruits, for each country to contribute its relative quota of soldiers. It is probable that too much importance has been attached to stature in selecting recruits for the army in this country, and that a high standard does not necessarily produce men best fitted for military duties. In the Report for 1879 are given two tables of the stature and weight of the English, Scotch, and Irish recruits for the years 1862–3, when the minimum standard of height was 66 in., and in 1864–65, when it was reduced to 65 in.; and the result of this change was to lower the general average stature of English recruits by only 0·17 in., of the Scotch by 0·21 in., and the Irish by 0·25 in., but in all three nationalities to increase the average weight—the English by 1·3 lb., the Scotch by 6·7 lb., and the Irish by 0·8 lb. A table showing the stature, weight, and chest-girth of recruits for 1860–4, contributed by Dr. Balfour and Inspector-General Lawson, given in the appendix of the report, indicates that a recruit of eighteen years of age may be expected to increase an inch in stature, an inch and a half in chest-girth, and 10 lb. in weight before he reaches the age of twenty-three years. An examination of Table I. shows that an adult Englishman of typical proportions has a stature of 5 ft. 7½ in.; a chest-girth of 36½ in.; a weight of 10 st. 10 lb.; and is able to draw, as in drawing a bow, a weight of 77½ lb. These are the *mean* proportions. The averages give greater weight for height. They are: height, 5 ft. 7½ in.; weight, 11 st. 1 lb.; empty chest-girth, 36·46 in.; and strength, 79·6 lb. For every variation of an inch in stature above or below the average, 2·301 lb. weight, ·342 inch chest-girth, and 1·182 lb. strength, must be added or subtracted to obtain the typical proportions. This rule of proportion is, however, only approximately correct, as variations in the stature depend largely on the length of the lower limbs, while the other qualities depend chiefly on the size of the trunk. A small table shows that men of the age of twenty-one years measure three-quarters of an inch more in the recumbent than the standing position; that the span of the arms across the chest is 2·31 in. in excess of the stature; and that the ratio between the sitting height and the standing height is as 1 to 1·906, the length of the trunk and head being 36·04, of the lower limbs 32·66, and the total height 68·7 in. A diagram shows the curves of stature for the four divisions of the United Kingdom. The English curve is nearly identical with the general average, the Scotch is above, and the Welsh below, and in a manner balance each other.

Table II. shows the relative stature, weight, and strength of adult males and females in England. The average stature of males is 67·36 in., and of females 62·65 in., showing a difference of 4·71 in. or nearly 4¾ in. The average weight of males is 155·0 lb., and that of females 122·8 lb., showing an excess of 32·2 lb., or about 2¼ st. on the side of males. The ratio between the stature of men and women in England is as 1 to 0·930, or as 16 to 14·88, the difference being somewhat greater than in Belgium, where, according to Quetelet, the ratio is as 1 to 0·937, or about 16 to 15 (strictly 16 to 14·99). The difference of strength is 35 lb., the females being little more than half as strong as males.

Table III. exhibits the average stature, weight, and complexion (colour of eyes and hair) of adult males born in the several counties of Great Britain and each of the provinces of Ireland. To save much detailed description, this table is illustrated by a series of five shaded maps, which present at once to the eye the relative distribution of those physical characters, and the results are especially interesting from an ethnological point of view. Map No. 1 shows the distribution of stature, No. 2 of weight, No. 3 of fair complexion—i.e., blue or grey eyes and light hair—No. 4 of dark complexion (i.e., dark eyes and dark hair), and No. 5 of mixed complexion (i.e., blue or grey eyes and dark hair). The variations in stature, weight, and complexion shown by the maps and tables to exist in different districts appear to be chiefly due to differences of racial origin, and this influence predominates over all others. We have reason to believe, from historical and antiquarian researches, that the ancient Caledonii, the Belgæ and Cimbri, and the Saxons and Frisians, as well as the Danes and Normans, were all people of great stature, while on the other hand the prehistoric (neolithic) race or races in Britain appear to have been of low or moderate stature. Hence the districts occupied by the various invading races show a higher stature than those where the descendants of the earlier stock survive. This is best demonstrated by separating a few of the counties where there has been the least admixture of foreign blood and comparing them together thus:—Early British—Cardigan, Radnor, and Brecon, 66·59 in., 169·3 lb.; Saxon—Sussex, Berkshire, and Oxfordshire, 67·22 in., 155·8 lb.; Anglian—Lothians, Northumberland, and Norfolk, 68·73 in., 166·7 lb.; Scandinavian—Shetland, Caithness, North and East Yorkshire, and Lincolnshire, 68·32 in., 162·7 lb. The highest stature is found in Ayr, Kirkcudbright, Wigton, the Lothians, and Berwickshire, where the average ranges from 69½ to 70 in., and the lowest in Herts, Middlesex, Surrey (ex. metrop.), Salop, Hereford, Monmouth, Gloucester, Wilts, Somerset, and South Wales, where it falls to 66 to 66½ in. The inhabitants of the more elevated districts possess a greater stature than those of the river valleys and fen districts; and everywhere, except in London and the home counties, the population of country districts is greater than that of towns. With respect to climate, the inhabitants of the northern and colder districts, and of the north-eastern and drier districts, possess a greater stature than those of the warmer and damper south-western portions of the island.

Table VI. shows the relative stature of ninety different

races and nationalities. With the exception of the few Polynesians of Samoa, Tahiti, and Marquesas, the English professional class heads the list; the New Zealanders, Patagonians, Angamis, and negroes of the Congo being nearly of the same stature. The Scotch head the list of the civilised races, but slightly exceed the general population of the British Isles, and the white population of the United States of America, which are almost identical in stature, the average of the British being 67·66 in. and the Americans 67·67 in. At the bottom of the table stand the Lapps, Andamanese, and Bushmen of South Africa. The difference between the taller and shorter race is 16½ in., and the average stature of man, according to these statistics, is 5 ft. 5½ in., or about that of the Austrians and the French working classes.

Table VII. shows the stature and weight of men living under different conditions of life, illustrative of the influences of special occupations, town and country breeding, intellectual and physical training, &c. As an example of the relation of high mental to physical qualities, the stature of ninety-eight Fellows of the Royal Society is given. Their average stature is slightly above (0·38 in.) that of the professional classes to which they chiefly belong. At the other end of the intellectual scale are the lunatics and criminals, which show a deficiency when compared with the general population of 1·96 and 2·06 in. respectively. In respect to complexion, lunatics show an excess of 5 per cent. of light eyes with dark hair; and criminals of 10 per cent. of dark eyes and dark hair. As an example of high physical qualities as developed by training, the measurements of eighty-nine professional and amateur athletes are given. Their average stature exceeds that of the general population from which they are drawn by 0·68 in., while their average weight falls short of that standard by 14·5 lb. The ratio of weight to stature is, in the athletes, 2·100 lb., and in the general population 2·323 lb., for each inch of stature. Thus, a trained athlete whose stature is 5 ft. 7 in. should weigh 10 st., while an untrained man of the same height should weigh 11 st.

The tables and maps showing the distribution of men of fair and dark complexion are interesting, as showing the extent to which the fair Saxon and Scandinavian stocks colonised the country, and they may be useful in studying the geographical distribution of disease. The greatest percentage of fair complexion is found in the Norse settlements of Shetland and adjoining parts of Scotland and North-east of England, and of dark complexion in London and the counties of Herts, Suffolk, and Essex; and also in the Mid-English counties of Lincoln, Leicester, Warwick, and Worcester. There is a general darkening of complexion from north to south of the island, but the peculiar combination of light eyes and dark hair, commonly known as the Irish type, is most prevalent in Scotland.

Table XI. shows the colour of eyes and hair of both sexes at each age from birth to seventy years, and is interesting as showing the darkening of the complexion with age. Fair complexion diminishes from 56 per cent. during the first five years to 33 per cent. at forty years, the dark complexion increases from 15·5 to 32 per cent., and the mixed complexion from 9·3 to 34 per cent. Grey hair comes on earlier in the dark than the fair complexion. The statistics referring to females show that darkening of the hair and eyes takes place to a much less extent among them than among males, and that there is less disposition for the hair to turn grey with advancing age.

(To be concluded.)

DISTRIBUTION OF PRIZES AT THE WESTMINSTER HOSPITAL MEDICAL SCHOOL.

AFTER the introductory address given by Mr. Boyce Barrow, the Very Rev. the Dean of Westminster alluded to the necessity of not neglecting the spiritual side of man while attending to his physical needs. In the course of his address he spoke as follows: "It is not impossible that the exceeding and ever-growing interest of the study of the phenomena and laws which come before you in the scientific part of your future profession may in some degree call away your attention, very naturally, but somewhat perilously, from that part of its wide domain which cannot possibly be reduced to system, and in which no microscope, no chemical test, no instrument however delicate, or indeed, any of the last discoveries of material science, can be of the slightest aid. You cannot afford to become purely and exclusively men of science. You cannot afford to shut up your souls from the souls of your fellow men if you are one day to treat the various forms of disease and injury to which their bodily constitutions are liable. Will you not, therefore, do well to cultivate not only the scientific spirit, but also all the qualities which will enable you to influence and to enter into the infinite variety of human character—i.e., of human organisation in its truest sense with which you will have to deal? I think I am right in advising you to cultivate not only all humane and tender feelings, but also parts of your mental being, which your technical training hardly touches, or at any rate does not foster, to give food and play to the imagination, to cultivate the taste, to enlarge, as far as possible, the intellectual and moral range, to hold your minds open to the influence of other men's professional ideas and interests; to do all in your power to enable you to keep alive a full current, genuine and unbidden, of sympathy between yourselves and those who will have recourse to your advice, to help men to feel (and I speak as one who knows its value) that they have in their medical adviser a friend and a sympathiser. The more entire that sympathy the more thoroughly you can enter into the various needs, the physical, the moral, even the spiritual needs of your patient, the greater the prospect of your doing well that to which your lives will mainly be devoted—the alleviation of human suffering. It is a very high calling; one which cannot be too highly honoured by any one who in any sense bears the title of a minister of Him who sent forth His disciples with a twofold commission—heal the sick, preach the Gospel."

The Dean then distributed the prizes, &c. obtained during the past session:—

HONOURS LIST—1882-83.

Entrance Exhibitions: E. O. Cox, The Fence, value £40 per annum; H. Brackenbury, H. S. Cooper (equal), value £40. Treasurer's Prize, for first winter subjects, value ten guineas: H. Brackenbury, H. S. Cooper (equal). President's Prize, for second year subjects, value twenty guineas: A. Hardwick. Chadwick Prize, value twenty guineas: J. Swain. Clinical Medicine, value £5: P. R. Mander. Clinical Surgery, value £5: J. Swain. Class Prizes and Certificates.—Anatomy: Senior Class—G. Cory, A. L. Gubb, A. Hardwick, F. J. Morgan; Junior Class—T. E. Pallett, H. S. Fremlin, E. Caudwell, and H. S. Cooper (equal), H. Brackenbury. Physiology: Senior Class—A. Hardwick, F. J. Morgan, A. L. Gubb; Junior Class—H. S. Cooper, H. Brackenbury, E. Caudwell. Histology: A. Hardwick, F. J. Morgan. Chemistry: H. S. Cooper, C. Burt, H. Brackenbury and H. Cox (equal). Medicine: J. Swain (prize). Surgery: J. F. Boyd and J. Swain (equal), prize; W. Urwick. Materia Medica: W. A. Wills, F. T. Simson (prize); W. E. Jackson, W. T. Rayne, E. Dawson, R. Hardwick, H. S. Fremlin (certificates). Botany: C. Burt (prize); H. S. Cooper (certificate). Forensic Medicine and Toxicology: J. Boyd (prize); J. Swain, J. D. Staple, W. G. Axford (certificate). Midwifery: J. T. Boyd (prize); W. Weaver, J. Swain (certificate). Histology: F. T. Simson (prize); C. Burt, F. S. Lambert, W. T. Rayne (certificate).

WILLS OF MEDICAL MEN.

THE will of Robert Boyd, M.D., formerly of 1, Bolton-row, Mayfair, but late of Southall-park, who died on Aug. 14th, was proved on the 13th ult. by Miss Mary Boyd, the daughter and sole executrix, the value of the personal estate amounting to over £7400. The testator leaves his piece of land at Wells to his son William Bernard; his share or interest in certain lands in Ireland to his sister Miss Cherry Pennefather Boyd for life, and then to his daughter Mary; and his house in Bolton-row, with the furniture and effects, to his daughter Mary, on condition that she provides a residence for her mother and sisters. The question as to whether his asylum at Southall shall be carried on after his death is left to the discretion of certain of his friends; if continued, the profits are to be divided between his four daughters, and if sold the proceeds, with the residue of his real and personal estate, are to be divided between his four daughters, Mary, Isabella, Ann Brunette, and Elizabeth.

The will and codicil of Alexander Patrick Stewart, M.D., late of 75, Grosvenor-street, who died on July 17th last, were proved on the 13th ult. by the Rev. Robert Walter Stewart, D.D., the brother, and Mr. Hugh Mackay Matheson, the executors, the value of the personal estate amounting to over £7300. The testator bequeaths £200 to the British Medical Association, to be added to the £400 recently contributed to it by him out of funds raised as a testimonial to him by

public subscription, and known as the Stewart Grant Fund, and to be applied in the same manner; and legacies to his executor, Mr. Mackay, and to his housemaid, cook, and manservant. The residue of his property he leaves to his brother for life, then to his brother's wife for her life, and then to his three nieces, the daughters of his said brother, Margaret, Elizabeth, and Louisa.

The will and codicil of Thomas Andrews Chaldecott, M.D., late of Harcourts, Chertsey, who died on March 26th last, were proved on the 19th ult. by Mrs. Ellen Lucas Chaldecott, the widow, and Mr. Thomas Edmund Harland Chaldecott, the son, the executors, the personal estate exceeding £1500. The testator leaves all his property to his wife absolutely, provided she remains his widow and unmarried, but in case she marries again then to his children.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Henry Matcham of Townley Castle, Ramsgate, £500 each to the Ramsgate Dispensary and the Hospital for Incurables, Putney.—Mrs. Mary Built of Union-street, Hertford, £100 to the Hertford Infirmary.—Dame Anne Helena Winnington of 116, Queen's-gate, £100 to the Worcester Infirmary, and £60 to the Torquay Consumption Hospital.—Miss Elizabeth Barlow of Wrexham Lodge, Ealing-green, £200 to St. Mark's Hospital for Fistula, and £100 each to the Lock Hospital, Harrow-road, the Hospital for Consumption, Brompton, and the Hospital for Diseases of the Chest, Victoria-park.—Mrs. Anne Jay of the Villa Bertolini, Lausanne, Switzerland, £2000 to the East London Hospital for Children and Dispensary for Women, Ratcliff-cross, and the residue of her property to the Bedford General Infirmary.—Mr. Weston Cracroft Amcotts of Hackthorn Hall, Lincolnshire, £50 to the Lincoln County Hospital, and £20 each to the Lincoln Dispensary and the Horncastle Dispensary.—Mr. Henry Couchman of Elm Cottage, Lee-road, Blackheath, £200 each to the Royal Kent Dispensary, Greenwich-road, the London Hospital, Whitechapel-road, the Seamen's Hospital, Greenwich, the Hospital for Consumption, Fulham-road, the Cancer Hospital, Fulham-road, and the Charing-cross Hospital, Strand.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Leeds.—Dr. Goldie, in his last monthly report, draws attention to the state of cellar dwellings which have been closed as unfit for human habitation. The areas attached to the disused cellar dwellings have become the depositories of so large an amount of filth and refuse that they have to be cleansed in much the same fashion as ashpits are. Surely a matter of this sort could be dealt with by the sanitary and police authorities in such a way that persons causing such a nuisance should be deterred by punishment from a repetition of the offence. Attention is further called to some houses which are unfit for habitation, and it is urged that they should be pulled down and that the spaces so formed should be left permanently open by way of providing "lungs" for a district which, from the description given, evidently stands in need of some provision of the kind.

Maidstone.—A circumscribed outbreak of small-pox is referred to in Mr. Adams's last annual report. Ten of the cases took place amongst the prisoners in the gaol, but in one instance the disease occurred in a person resident two doors only from the hospital for infectious diseases, which has hitherto consisted of two cottages which, with others, formed a continuous row. This is not the first time that small-pox has apparently been spread from this hospital, and though, owing to its faulty position and construction, no general inference can be drawn from the circumstance, which can apply to properly built and well-organised hospitals, yet the mere fact that no other disease than small-pox is known to have thus spread from the building affords an additional proof that in the case of small-pox we have to do with a disease which, for the purposes of isolation, needs to be dealt with under conditions of far greater stringency than need apply to the other infectious fevers. Such an event may be, however, regarded as no longer possible at Maidstone for the Corporation have, under Mr. Adams's advice now provided themselves with an excellent hospital for infectious diseases. Dealing with scarlet fever, of which seventy-six cases came under notice, Mr. Adams urges that no children should be allowed to attend school from a house that has been infected until they are provided with a certificate from himself, or from some other medical practitioner. The principle is excellent, but the difficulty that has hitherto occurred has been in reference to the payment for such certificates, especially in districts where the medical officer of health is in practice. Mr. Adams is apparently willing to supply such certificates as a part of his duties in his capacity of health officer. Diphtheria caused eight deaths, and "sore throats" of a serious character "were widely prevalent, especially about the month of October last." In connexion with this Mr. Adams points out that the rainfall for the month in question was excessive, amounting as it did to 5·7, against an average of 2·8, inches; that the ground was never dry, the sun for nearly the whole of the last three months of the year forsaking the town; and that whereas, owing to the physical features of Maidstone, wind currents can only reach the town from two directions, one bringing an air charged with marsh and alluvial vapour, there was during the latter part of 1882 a singular deficiency of wind which was not subject to deteriorating influences. Mr. Adams supplements his reports by a series of meteorological diagrams, showing, first, the amount of wind per month from the eight quarters according to the Greenwich register for an average of forty-one years; secondly, the wind during the several months of 1882, and the amount of deviations from the normal average in each direction; and, thirdly, the mean temperature, the range of temperature, the amount of rainfall, and the degree of humidity for each month. The diagrams are variously coloured, according to the points they are intended to illustrate, and they afford an excellent example of the meteorological work which can be carried out in sanitary districts with a view of elucidating points connected with the etiology of disease. Already Mr. Adams is convinced that the study of local climatic temperature must reveal qualities with which the health of the town will be found to be in sympathetic movement.

Tottenham (Urban).—This is a rapidly increasing district, plans for 10,833 houses having been submitted during the past six years. The annual death-rate was 18·0 in 1882. According to Dr. Watson fatal cases of fever, diphtheria, and diarrhœa have occurred, especially where drainage and other nuisances exist, and it is evident, from his description of the foul state of the Stonebridge-brook, of the Moselle-brook, and of branch sewers so charged with sewage as to be little better than cesspools, that conditions highly injurious to health obtain in the district. Altogether Dr. Watson heard of 370 cases of scarlet fever, sixty of diphtheria, and fifty of enteric fever; and he specially advocates remedial measures for polluted ditches, blocked sewers, inadequate sewer ventilation, &c. The prospect is, at present, by no means favourable for the future health of those who may occupy the many buildings erected.

Middlesex and Herts Combined District.—In his annual report on these districts, Dr. C. E. Saunders presses upon the authorities the need for providing means of isolation, and, fortifying himself by means of the official report relating to this subject, also by the experience gained in the Berkhampstead rural district, which is within the combined area, he enforces the lesson that hospitals for infectious diseases to be of value should be built with due deliberation and in anticipation of the use to which they are to be put. He next proceeds to give detailed advice as to the sanitary principles which should govern the construction of dwelling-houses, and which can best be regulated by a code of efficient bye-laws. We note with satisfaction that a system of public scavenging is steadily becoming general in these districts. It has long been notorious that to cast this duty upon the occupiers of dwellings very generally occasions great difficulty in securing proper removal of filth, and it is this which, above all other things, has led to the construction in close proximity to houses of huge receptacles for refuse. Throughout the total area of the combined districts the mortality has been at the rate of 15·6 per 1000. Turning to the several districts specified, we observe one great sanitary defect in Barnet town. The great majority of the waterclosets are without a proper water-supply, a defect which leads not only to nuisance in the individual closets, but, by reason

of inadequate flushing, to stagnation, if not deposit, both in sewers and house drains. Typhoid fever, if imported, as it has been before, into this district, would certainly soon find out so weak a place in the sanitary armoury of the locality; and since we have reason to believe that the provision of water-fittings can legally be enforced in the case of a so-called watercloset, we join with Dr. Saunders in urging that the authority should no longer delay taking steps to deal with so obvious a source of nuisance and ill-health. In the Hemel Hempsted rural district there has been a long-standing defect in connexion with a contaminated and insufficient water-supply. The terms on which a water company are willing to supply the defect do not, however, receive the approval of the central authority, and so the matter remains as heretofore. Rickmansworth is in a very bad sanitary state. A committee investigated the circumstances as far back as 1877; but it is now reported that there have been no very material changes since that date. Railway communication is making this town more accessible, but it will need radical reform if it is to become an attractive residential resort. Systems of sewerage, drainage, and water-supply are obviously needed there. Pinner has suffered from diphtheria; but its sewerage is completed, and the Colne Valley Company supply it with water. It remains to make proper house connexions with the sewers, the house drains being strictly regulated under good bye-laws, and also to lay on the excellent water service to the individual houses. Dr. Saunders' reports are always interesting, as embodying much detailed information as to the sanitation of small towns, villages, and hamlets; the present one forms no exception to the rule.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5422 births and 3054 deaths were registered during the week ending the 6th inst. The annual death-rate in these towns, which had been 19·6 and 19·1 per 1000 in the two preceding weeks, further declined last week to 18·5. During the thirteen weeks of last quarter the death-rate in these towns averaged 19·9 per 1000, against 20·5 and 20·6 in the corresponding periods of 1881 and 1882. The lowest rates last week in these towns were 12·3 in Huddersfield, 13·8 in Halifax, 14·0 in Bristol, and 14·1 in Brighton. The rates ranged upwards in the other towns to 23·5 in Liverpool, 23·6 in Wolverhampton, 26·5 in Manchester, and 28·6 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which in the four preceding weeks had declined from 763 to 563, further fell last week to 482; they included 207 from diarrhœa, 114 from scarlet fever, 57 from "fever" (principally enteric), 37 from measles, 31 from whooping-cough, 26 from diphtheria, and 10 from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Halifax and Brighton, and the highest in Liverpool and Preston. The deaths attributed to diarrhœa, which had been 267 and 279 in the two preceding weeks, declined last week to 207. As in the previous week, this disease was three times as fatal in the provincial towns as in London, and caused the highest death-rates in Wolverhampton, Bolton, and Preston. Scarlet fever showed the largest proportional fatality in Salford, Sheffield, and Leeds; measles in Salford and Newcastle-upon-Tyne; whooping-cough in Newcastle-upon-Tyne; and "fever" in Salford and Liverpool. The 26 deaths from diphtheria in the twenty-eight towns included 19 in London and 2 in Plymouth. Small-pox caused 6 deaths in Birmingham, 3 in London, and one in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals, which had been 57 and 60 on the two preceding Saturdays, was 58 at the end of last week; 12 new cases were admitted to these hospitals during the week, against 10 and 9 in the two preceding weeks. The Highgate Small-pox Hospital contained 8 patients on Saturday last, 4 new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which in the two preceding weeks, had been 167 and 163, rose last week to 191, but were 69 below the corrected average. The causes of 61, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Norwich, Plymouth, Birmingham, Birkenhead, and Oldham. The proportions of uncertified deaths were largest in Liverpool, Halifax, and Cardiff.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·0 and 20·6 per 1000 in the two preceding weeks, declined to 17·0 in the week ending the 6th inst.; this rate was 1·5 below the mean rate during the week in the twenty-eight English towns. The rates in the Scotch towns ranged from 8·5 and 13·3 in Perth and Aberdeen, to 18·9 and 19·9 in Greenock and Paisley. The deaths in the eight towns included 64 which were referred to the principal zymotic diseases, and showed a further considerable decline from recent weekly numbers; 25 resulted from diarrhœa, 12 from diphtheria, 11 from scarlet fever, 7 from whooping-cough, 5 from measles, 4 from "fever," and not one from small-pox. The 64 deaths were equal to an annual rate of 2·7 per 1000, which was slightly below the rate from the same diseases in the large English towns. The highest death-rates from these diseases in the Scotch towns last week occurred in Glasgow and Greenock. The 25 deaths from diarrhœa showed a decline of 6 from the number in the preceding week, and were considerably below those returned in the corresponding week of last year; 15 occurred in Glasgow. The deaths referred to diphtheria, which had been 20 and 23 in the two previous weeks, declined to 12 last week, of which 6 were recorded in Glasgow and 3 in Aberdeen. The 11 fatal cases of scarlet fever were 1 less than those returned in the preceding week, and included 7 in Glasgow and 2 in Edinburgh. The deaths referred to whooping-cough, which had been 13 and 18 in the two previous weeks, were but 7 last week, of which 4 were recorded in Glasgow and 2 in Edinburgh. The 4 fatal cases of "fever" corresponded with the number in the preceding week; the 5 deaths from measles showed a further slight decline from those returned in recent weeks, and included 2 in Glasgow and 2 in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns showed a further decline of 16 from the numbers recorded in the two previous weeks, and were but little more than half the number in the corresponding week of last year. The causes of 66, or more than 18 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 27·5, 24·9, and 23·7 in the three preceding weeks, further declined to 23·4 in the week ending the 6th inst. During the thirteen weeks of last quarter the mean death-rate in the city was 22·8 per 1000, against 18·8 in London and 17·0 in Edinburgh. The 157 deaths in Dublin showed a decline of 2 from the number in the previous week; they included 10 which were referred to diarrhœa, 7 to scarlet fever, 3 to whooping-cough, one to measles, and not one either to small-pox, diphtheria, or "fever." Thus 21 deaths resulted from these principal zymotic diseases, against 24 and 29 in the two preceding weeks; they were equal to an annual rate of 3·1 per 1000, while the rate from the same diseases was 2·4 in London and 2·0 in Edinburgh. The 10 fatal cases of diarrhœa were one less than those returned in the previous week. The deaths referred to scarlet fever, which had been 4 and 10 in the two preceding weeks, declined to 7 last week. The fatal cases of whooping-cough exceeded by one the number in the previous week. No death was referred to "fever" in the city during the week, the numbers in the two preceding weeks having been 4 and 6 respectively. The deaths of infants showed an increase, while those of elderly persons were fewer than in the previous week. The causes of 32, or 20 per cent., of the deaths registered during the week were not certified.

SPREADING DISEASE.—On the 3rd inst., at Gloucester, an innkeeper was summoned for causing a man whom he employed as cook to be exposed in a public place whilst suffering from scarlet fever, without having taken proper precautions against the spread of the disease. Defendant said that he did not know that he was breaking the law, and pleaded not guilty. Subsequently, however, he pleaded guilty, and after a lengthy hearing a fine of £3 and costs was imposed—in all, £6 4s. 8d.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Deputy Surgeon-General Alexander Dudgeon Gulland, M.D., has been granted retired pay with the honorary rank of Surgeon-General; Brigade-Surgeon Joseph John Thompson, to be Deputy Surgeon-General, vice H. T. Reade, V.C., retired on temporary half-pay; Surgeon-Major William Gerard Don, M.D., to be Brigade Surgeon, vice J. J. Thompson; Surgeon-Major Edmond Hoile, M.D., has been granted retired pay with the honorary rank of Brigade Surgeon; Surgeon Kingston Dodd Lloyd Kirkwood has resigned his commission; Surgeon William Clement Milward, M.B., resigns his commission.

ADMIRALTY.—The following promotions have been made: Surgeons Isaac Henry Anderson, M.D., William Berkeley Drew, William Rogerson White, B.A., M.B., Richard Gavin Brown, M.B., and Ralph Westropp Breretron, to be Staff Surgeons in Her Majesty's Fleet, with seniority of September 30th, 1883.

The following appointments have been made:—Surgeon Matthew Digan, to the *Polyphemus*, vice Ronan; Surgeon William M. Rae, to the *Duke of Wellington*, complement incomplete.

Correspondence.

"Audi alteram partem."

"DIPHTHERIA AT MILL-HILL."

To the Editor of THE LANCET.

SIR,—Will you allow me to say a few words on the supposed connexion between the epidemic of diphtheria at Mill-hill and the practice adopted by the East London Hospital of sending convalescents to board with cottagers living at Mill-hill, at the expense of a lady and gentleman living there.

Twenty-three children have been sent within the last eighteen months; of these one child was sent on Oct. 3rd, 1882, three months after an attack of croup. In this hospital we consider croup as identical with diphtheria, at any rate as regards any sanitary precautions we may take. Another child was sent on Jan. 20th, 1883, six weeks after an attack of diphtheria. These are the only cases that could have had any connexion with the diphtheria epidemic at Mill-hill. Whatever the opinion of the profession may be as regards the identity of croup and diphtheria, and as to how long infection may hang about convalescents from either disease, none but the most prejudiced would admit the first case as having anything to do with the epidemic. The second case may be more open to doubt, though few practitioners would hesitate to consider a child as free from infection after a lapse of six weeks. Moreover, the first fatal case in the Mill-hill ward occurred on Dec. 14th—i.e., more than a month before the second case from our hospital was sent there. Dr. Cameron also stated that no connexion had been traced between the above cases and those occurring at Mill-hill. In the *Daily Telegraph* of Sept. 24th a long account was published, headed "Diphtheria at Mill-hill." A letter of mine, sent to Dr. Cameron in reply to one from him, asking if any convalescents from diphtheria or scarlet fever had been sent from our hospital, was also included; but the most important portion of the letter was omitted—viz., that referring to the time at which the children were sent to Mill-hill after suffering from diphtheria. I have reason to know that many persons reading the above account saw it in a more or less direct indictment against our hospital as being the cause of the Mill-hill epidemic. Because the local sanitary authorities have been unable to trace the origin of the epidemic to their own satisfaction, it is, to say the least, unfair to make the East London Hospital the scapegoat. Dr. Cameron, in his report to the Hendon Local Board, remarks:—"It will thus be seen that convalescents from diphtheria have been sent to Mill-hill from this hospital, and that cases of scarlet fever had occasionally occurred in it. I am therefore of opinion that if the present practice of boarding out these convalescents amongst cottagers in the district be continued it will be a source of danger to the neighbourhood, and should be discontinued and proper hospital accommodation provided for the purpose." Personally, I am inclined to think Dr. Cameron is right in his recommendation of hospital accommodation for convalescents, not because our convalescents, or those from any London hospital, are likely to be sources of danger to any neighbourhood to which they may be sent, but because the public have a natural though unfounded prejudice against convalescents from hospitals being scattered in their midst. There is not the same prejudice against convalescent homes, and, strange to say, children or other convalescents sent direct from the crowded dens of London would be received with less prejudice amongst them than the carefully selected cases sent from our great London hospitals. I am, Sir, yours truly,

J. SCOTT BATTAMS,
Resident Medical Officer, East London Hospital for Children.

Oct. 4th, 1883.

INTRA-PERITONEAL INJECTIONS IN CHOLERA.

To the Editor of THE LANCET.

SIR,—The great importance of this subject must be my excuse for troubling you; but I will endeavour to be as brief as possible.

Hypodermic injections of drugs, though the best way of administering them in cholera, not having proved a cure for the grave Asiatic forms of that disease, it is evidently our duty to look for some other weapon to combat the malady when these fail. They have been largely tried. I believe I was the first to do so in Poona, Bombay Presidency, in 1863-66 (*vide* Deputy Inspector General Murray's Résumé of the Treatment of Cholera from all Sources, published by the Bengal Government). I tried, of course, morphia, atropia, Condy's fluid, solution of bichloride of mercury, chloral, and subsequently ammonia, bromide, &c., with (as shown in a letter published by you on Oct. 16th, 1880) very varying success. In that letter I mentioned that I injected large quantities of warm water subcutaneously into the cellular tissue of the arms and legs in order to procure slow absorption of fluid, since rapid absorption by intravenous injection of fluids had failed ever since days of Hamilton in Edinburgh, when it was exhaustively tried both with plain water and saline mixtures. The plan of injecting fluid into the cellular tissue, and thereby inducing an artificial dropsy, was no invention of mine, but of a Bengal surgeon, whose name I unfortunately cannot recall, and who based his theory of success on the fact of dropsical patients having been said to recover both from dropsy and cholera when attacked by the latter disease. Mine was the first case in which the plan was tried, I believe; and although the patient had long been a sufferer from dyspnœa, chronic bronchitis, and embarrassed heart, we believed that the almost miraculous resurrection which took place would be permanent. He died, however, on the second day, like the cases so graphically described in Edinburgh by Begbie. This case was, moreover, a most unfavourable one. The man had had the "asthmatic voice" for years, and was always slightly cyanotic. Whether the injection and slow absorption of fluid into the treacle-like cholera blood (which itself is incompatible with life) will, by giving time for the cholera poison to be eliminated, ever prove a cure, in contradistinction to the failure of rapid intravenous injection and absorption of fluid, is a matter yet to be decided. But I regret that a perhaps natural timidity made me refrain (this was the sixth epidemic I had witnessed—namely, in 1876), from employing what now appears to me to be likely to prove a much more effective weapon—that is, injection of warm water, milk, &c., or nutritive or medicated solutions, into the peritoneum.

Bizzozero and Golgi declare that the injection of defibrinated blood even is in general devoid of danger. Professor Mosler had a fatal case on repeating the injection after twelve days, but attributes it to the too early repetition of the operation. Dr. Kaczorowski of Posen has had four absolute cures from debility and anæmia by injecting about 400 grammes of defibrinated blood (repeated in one case). All appear to have been absolutely confined to bed before the operation restored them to perfect health. Dubar and Remy have shown that albumen in solution is absorbed by the peritoneum, and that it is well borne and inoffensive. It is evident that the operation, especially with simple water

which has been well boiled and allowed to cool to a comfortable temperature, is quite feasible, and holds out some prospect of success.

In the case where I injected the cellular tissue of the four limbs I simply used the medium-sized needle of a Dieulafoy's aspirator, previously attached by a piece of india-rubber tubing to a large hospital pewter enema syringe. For the peritoneum it would probably be advisable to divide the integuments with a lancet on the linea alba, and to take out the piston before thrusting in the hollow needle, so that the flow of water through it, the full syringe being held at a higher level, would to some extent push aside the intestines and prevent injury to them.

Surely if this operation has been judged advisable in chronic cases of debility, a malady like cholera, in which no time is to be lost, and when, quite apart from true cholera poison, the want of fluid in the blood stops the circulation, secretion, &c., and can kill *per se*—surely in this malady such a procedure is eminently called for, even if only after subcutaneous injection of large quantities of water into the cellular tissue of the four limbs. It infallibly brings the patient out of the collapse, and, acting gradually, may keep it away till the poison be eliminated or exhausted.

I am, Sir, yours truly,

CAMERON MACDOWALL, L.R.C.P.,
Brigade-Surgeon I.M.D., Principal Medical Officer,
Sept. 1883. Quetta, Afghan Frontier.

PROFESSOR LANKESTER AND THE SCOTTISH UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—A fortnight ago it seemed incumbent on me to point to the one-sided statements as regards our universities made by Professor Lankester at Southport. I mentioned the fact that in each of these institutions the nearest approach to his own ideal and the German system had been reached in the study and teaching of the biological sciences, and that, instead of praise, he heaped blame upon their management simply because the professors received too much money, and that out of the pockets of the students. It seems that Scotch professors can enjoy incomes reaching as high as £3000 a year from fees of three or four guineas a session, and that English teachers charging from four to seven guineas are crying for public funds! Mr. Lankester's views of the law of supply and demand, as expressed in THE LANCET of last week, suggest the further lowering of the small fees here as a remedy, thus showing how eminence in one branch of science may prevent a knowledge of elementary principles in another. The fact, however, should not be lost sight of that, instead of incomes of two or three thousand pounds, which are only equal to those of many successful general practitioners, the majority of our professors do not derive £1000 a year from their classes. Though Professor Lankester now acknowledges his withdrawal from one of the two richest chairs in Scotland to have been due to a threatened impairment of income by the abolition of compulsory attendance, he proceeds to cut and carve at other men's earnings in the freest possible manner, and (in his address at Southport) considers compulsory attendance as an abuse. He could not trust either the Legislature or the university authorities to deal fairly by him in this matter of income, but without hesitation proposes to cut in two that of his successor, and suggests such voluntary sacrifice on the part of other teachers as has never yet been accomplished by public servants. I believe the day is near when, for the purpose of affording suitable salaries for assistants, some rearrangement of funds may be necessary; but it is to be hoped the present professors will not take the first train to London, preferring rather to act generously in their respective positions, and avoid the easy charity which is doled at the expense of their fellow-workers. This is not an Edinburgh question only, as Mr. Lankester seems to think, but one of the most important now exercising the minds of Scottish university reformers. Whether settled by means of the coming Universities Bill or by intra-mural effort is a question not yet decided; but in some way the want will surely be met without undue exactions from men who in the majority of instances are underpaid. By-and-by Mr. Lankester will attack the beam which he plainly sees in his own eye, and he will have Scottish sympathy in his present efforts to improve matters in the south; but in all probability the mote he has made so much of will be removed without his aid, and then I am sure he will give to the system of teaching in Scotland his sympathy and good word. Even without this, it has the highest success and the brightest promise.

I remain, Sir, yours faithfully,

October, 1883. THE WRITER OF "SCOTTISH NOTES."

To the Editor of THE LANCET.

SIR,—Professor Ray Lankester is mistaken in supposing that I am the writer of your "Scottish Notes." I am only responsible for the *Edinburgh* news.

I am, Sir, yours truly,

THE EDINBURGH CORRESPONDENT OF
Edinburgh, Oct. 6th, 1883. "THE LANCET."

THE WESTMINSTER UNION.

To the Editor of THE LANCET.

SIR,—Referring to the article which appeared in your journal of last week, allow me to remark that the course taken by the Local Government Board in determining not to call upon the master of the workhouse to relinquish his office is really more inconsistent than you say. It was in consequence of the want of confidence which a minority of the guardians felt in the willingness and ability of the guardians as a body to inquire into and determine upon the several matters which the Local Government Board were invited to investigate, that application was made to that Board to hold an inquiry. When the inquiry was concluded, the whole of the depositions were submitted by the Local Government Board to the guardians. These depositions contained the evidence upon which the Local Government Board came to the conclusion that several of the charges made against Mr. Bliss were established. Notwithstanding that the guardians considered this evidence, they still stated that the master had their confidence; and as this confidence had led to all the difficulties in which the guardians have been and still are involved, it seems unaccountable that the Local Government Board should fall back upon this confidence as their main reason for abstaining from requiring the master's resignation.

There is really no pretence for calling upon Dr. Rogers to resign his office, and still less for suspending him from the performance of his duties. It should not be forgotten that when a witness is in the witness-box he is bound to answer all relevant questions which are put to him; and because Dr. Rogers had to answer questions which were unpalatable to the majority of the guardians, it is hardly fair to visit him with suspension from his office for having given answers which he was obliged to give upon oath. Until the recent inquiry no one ever thought of calling upon the Doctor to resign, and it is but fair to him to say that it was in no way originated or promoted by him. This is perhaps a statement which some of the authorities may be disposed to question, but it is nevertheless an absolute fact.

I remain, Sir, your most obedient servant,

Oct. 9th, 1883. ONE OF THE GUARDIANS.

LIVERPOOL.

(From our own Correspondent.)

THE MEDICAL FACULTY OF THE LIVERPOOL UNIVERSITY COLLEGE.

THE session opened on the 29th ult. under very favourable auspices. Lord Derby presided with his usual ability. There was a large attendance of the public, and Professor Herdman's address, which was a most able one, was listened to with great attention. It is too soon yet to ascertain the number of new students this winter, but there is every reason to hope that it will equal, if not exceed, that of former years. The Liverpool School of Medicine was founded in 1834, and has therefore nearly completed half a century's existence.

THE DISSECTING ROOMS.

As a school of anatomy our local medical school has for many years past enjoyed a high reputation under the able supervision of Professor Mitchell Banks. He is ably assisted at the present time by Dr. Barron, a former student of the school, who obtained honours at the London University. There are seven subjects in the room. Dr. Barron has received already the names of over sixty students who purpose joining the dissecting class, and it is believed that this number will be augmented before the registration list is closed.

THE SITE OF THE NEW INFIRMARY.

In April last the City Council adopted a resolution by which the members pledged themselves to apply to Parliament for powers to acquire a piece of land adjoining the present infirmary at its northern end, so as to obtain an additional and more convenient site for the new infirmary. Much dissatisfaction is felt with a more recent decision of the Council, which has virtually rescinded the resolution of April last, and referred the matter to a Select Committee. It is very important that the new buildings should provide not only ample space for wards, but also a large enclosure for the recreation of patients and for the better preservation of the health of all the inmates. The additional site required will be no more than sufficient for the main entrance, residence of officers, and for patients' reception-rooms. The Royal Infirmary has now existed since 1749, a period of one hundred and thirty-four years. Until 1820 it was situated in the very centre of the town. The present building was erected and completed in 1824, just sixty years since, and has always ranked high among provincial infirmaries. The present position is therefore one the importance of which cannot be over-estimated, and it is to be hoped that the City Council will adhere to their original decision.

CASES RECENTLY OPERATED UPON BY MR. BANKS.

Mr. Banks recently excised the tongue in an elderly man, in consequence of a malignant growth, performing first, as is his general rule, preliminary laryngotomy. This latter proceeding prevents many of the occurrences which tend to embarrass the operator and endanger the patient. In this case Mr. Banks divided the tongue along the centre and removed each half separately; the patient made an excellent recovery, and, under the circumstances, speaks very fairly. Mr. Banks also recently tied the right subclavian artery in the third part of its course for an aneurism of the axillary artery. The patient, a young man, recovered well, the only unfavourable symptom being the formation of a small abscess. At the present time (eleven weeks since the operation) the radial pulse can just be felt.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

OUR Hospital Sunday Fund meeting was held on Thursday last, and an abstract of the report then submitted has many points of interest, as showing a steady increase in the collections. In 1882 the collections were a total of £3831 16*s.* 6*d.*, being an increase of £454 7*s.* 8*d.* on the previous year. The increase is very gratifying to all participating in this good work, for it had been made in workshops and factories, as well as in places of public worship. It has been shown that the amount collected by this great fund since its institution in 1870 has reached over £40,000, all of which has been distributed to the various charitable institutions of Newcastle and Gateshead, so it will be seen that immense benefit must have accrued within the last few years to the destitute sick. The greatest credit is due to our townsman, Mr. Councillor R. H. Holmes, and to all who have worked so efficiently with him, in bringing about those beneficent results.

FEVER HOSPITAL ACCOMMODATION IN SUNDERLAND.

The *Sunderland Daily Herald and Post* says that the town clerk has received a very important communication in the way of a remonstrance from the Local Government Board, pointing out that it has been surprised to learn that the health committee propose to enlarge the House of Recovery, when nothing less than a permanent building with pavilions, in which cases may be treated separately, will suffice to meet the necessities of a town like Sunderland. The Board also censures the plan of sending non-pauper fever cases to workhouse hospitals, as being not only illegal but calculated to excite hostility against the hospital treatment of infectious diseases. In conclusion, the letter directs the health committee's attention to the report of Dr. Thorne, in which are set down the primary conditions of a proper fever hospital. These include accessibility, wholesomeness, and openness of situation, and ward space to allow each patient 2000 cubic feet of air. Many months ago THE LANCET, in its Commission Report and in various articles, pointed out the sanitary shortcomings of Sunderland; perhaps now the authorities may bestir themselves when they are shown to be following an illegal as well as a stolid course.

EXTRAORDINARY OBITUARY LIST AT BLAYDON-ON-TYNE.

At the monthly meeting of the Blaydon Local Board, Dr. Philip Brown drew attention to some curious points in the registrar's returns for the quarter ending September 30th, from which on analysis it was shown that of fifty deaths no fewer than thirteen were persons over seventy years of age, whose united ages amounted to 1038 years, an average of 79·88 years, or nearly eighty years each. Of the total, five died at ages over seventy, as follows: one at seventy-one, one at seventy-two, two at seventy-three, one at seventy-four, and one at seventy-eight. Six died at ages over eighty, as follows: one at eighty-two, two at eighty-four, one at eighty-five, one at eighty-seven, and one at ninety-three. Two males and three females died within a radius of 200 or 300 yards of each other; four of them at the small hamlet of Path Head. Such an occurrence within the brief period of three or four weeks was stated to have been altogether without precedent in the history of the district, which, with the exception of measles, was free from epidemic and infectious diseases.

SAMUEL M'CUTCHEON, M.D.Q.U.I.

I regret to mention the death, from acute pneumonia, of Dr. S. M'Cutcheon, of Middlesborough, which took place on Sept. 18th, after an illness of only three days. He was born near Belfast in 1844, so that at the time of his death he was just in his thirty-ninth year. He was educated at the Queen's College, Belfast, and took his M.D. in 1874. Soon afterwards he assisted Dr. Merryweather, of Guisbro', and conducted an important branch practice at Skelton, in Cleveland. About four years ago he accepted an appointment in Middlesborough, and commenced practice there on his own account. Before leaving Skelton he declined receiving a testimonial from his friends, saying, "A man wants no extra reward for doing his duty," and the expression was a key to his character, being naturally modest and retiring, at the same time cheerful and affable, extremely kind and benevolent to his poorer patients, and painstaking and conscientious with all. His success in Middlesborough was very marked as regards his professional progress. It is much to be feared, however, that the atmosphere of this dense town undermined a constitution never very strong, and which suffered no doubt by the change from the pure air and surroundings of the Cleveland hills. On the evening of the 13th, after a hard day's work, he took to his bed, and on the 17th he passed quietly away, remaining conscious to the last, and expressing a wish to his friend Mr. Ellis that he should see him buried at Skelton, which last desire was fulfilled on the 20th ult., and out of respect to his memory all places of business at Skelton were closed.

Newcastle-on-Tyne, Oct. 10th, 1883.

EDINBURGH.

(From our own Correspondent.)

THE FORTHCOMING WINTER SESSION.

ALTHOUGH the winter session does not commence until October 23rd, a considerable number of students have already returned to work. The dissecting-rooms were opened on Oct. 1st. The number of medical students flocking to Edinburgh seems still increasing, and the classes during the forthcoming session promise to be more largely attended than ever. At the recent preliminary examination in Arts for medical students there were between 410 and 420 entries, a number considerably greater than has been previously reached at this

period of the year, the April examinations being more largely attended than the autumn ones. The number of entries for the first professional examination, which commenced yesterday (Oct. 11th), is also larger than hitherto, being over 300.

NEW MEDICAL BUILDINGS.

The portions of the New University Buildings devoted to the departments of chemistry, materia medica, and medical jurisprudence, are being rapidly pushed forward and are approaching completion. They are, if possible, more lavish as regards space, fittings, &c., than the departments already opened. I shall defer a detailed account until after their completion.

NEW MEDICAL JOURNAL.

The desirability of having a weekly medical journal in Scotland has for a long time been mooted, and has found active expression in the publication of the *Edinburgh Clinical and Pathological Journal*, the first number of which will be issued to-day. The journal is under the joint editorship of Dr. Graham Brown (medicine), Dr. Cathcart (surgery), and Dr. Berry Hart (midwifery).

HEALTH OF EDINBURGH.

Dr. Littlejohn's report of the health of the city for the past month (September) shows the number of deaths to have been 283, or 14·47 per 1000, a smaller mortality than has been recorded in September during the last five years. Of the total number of deaths last month, 85 were in the New Town, 159 in the Old Town, and 39 in the southern suburbs; the rate per 1000 in the New Town being 11·62, as compared with 10·26 in 1882; in the Old Town, 17·13, as against 21·84; and in the southern suburbs, 13·19, as contrasted with 11·30. During the month 384 cases of infectious diseases were reported, comprising 204 of scarlatina, 113 of measles, 44 of typhoid, and 23 of diphtheria. Of the scarlatina cases 99 occurred in the New Town, 88 in the Old Town, and 17 in the northern districts; of measles, 30 occurred in the New Town, 78 in the Old Town, and 5 in the southern districts; of typhoid, 16 occurred in the New Town and 28 in the Old Town; of diphtheria, 10 occurred in the New Town, 4 in the Old Town, and 9 in the southern suburbs. No cases of typhus were reported during the month.

SCOTTISH NOTES.

(From our own Correspondent.)

A REMARKABLE HEAT WAVE.

A REMARKABLE wave of heat is passing over the North of Scotland at the time of writing. On Saturday night the temperature rose suddenly, after a dry, cold week, and on Sunday the records were from 13° to 21° higher than on the previous day. The maximum at Aberdeen reached 72°, and in all our northern stations was considerably above 60°. Going southwards, it gradually became cooler, till in London it stood at 55°. It is many years since such October readings have been recorded so far north; and beyond the fact that a deep depression was observed travelling towards Norway on Sunday, nothing otherwise peculiar has been noticed in the atmospheric condition. This remarkable phenomenon is thus unaccounted for by the meteorologists.

DEEP-SEA OBSERVATIONS.

Professor Cossar Ewart, of Edinburgh, his assistant, Mr. Cunningham, and Dr. Gibson acting as chemist, have returned from the voyage of investigation round our northern shores, undertaken at the request of the Scottish Fishery Board. Frequent records of the temperature at different depths have been taken, samples of surface and bottom waters have been secured, many denizens of the deep have been caught, and experiments have been conducted on board with the herring spawn. It will take some time to arrange and label the many specimens, but when this has been accomplished a report will be prepared for the Fishery Board dealing with the habits of the herring and other fishes and crustacea.

ROBERT MOFFAT, M.D. EDIN. (FALKIRK).

By the death of Dr. Moffat, which occurred on the 5th inst., Falkirk and its neighbourhood have been deprived of the services of an efficient and much-valued practitioner. Dr. Moffat had been in failing health for some time, and a few weeks ago went to Bridge of Allan with the view of regaining his wonted strength; but, instead, his weakness became more marked, and he died there. Born in Musselburgh and educated at Edinburgh University, he graduated there in 1856, taking at the same time the College diploma. Since then he had practised for various periods in Kettle, Polmont, and Falkirk, and in each of these places he obtained a good position and practice. Dr. Moffat was about fifty-two years of age, and was twice married. He leaves a widow, and also four children by his first marriage.

PERTHSHIRE MEDICAL ASSOCIATION.

The meeting of this Association for the annual election of office-bearers was held in the County and City Infirmary on the 5th inst. There was a large attendance of members present. The President for the past year, Dr. Thom, sen. (Crieff), delivered his retiring address, the subject being "Practical Sanitation," and was awarded the thanks of the meeting. Dr. Baird (Almond-bank) having sent in his resignation as Secretary, the Association passed a resolution expressive of special cordial thanks for the able and zealous manner in which Dr. Baird had filled office during the past four years. Dr. Paterson (Perth) was elected a life member in consideration of the interest taken by him in the Association since it originated. The Council's and Treasurer's reports were presented, and showed a satisfactory condition of business and progress. The following appointments for the ensuing year were made:—President: Dr. Bramwell, Perth. Vice-President: Dr. Morrison, Dunning. Secretary: Dr. Ferguson, 5, Charlotte-street, Perth. Treasurer: Dr. Gillespie, Methven. Members of Council: Dr. Robertson, Errol; Dr. Kennedy, Perth; Dr. Thom, sen., Crieff; Dr. M'Callum, St. Martin's; and Dr. M'Naughton, General Prison. Dr. Urquhart, Murray's Royal Asylum, was appointed to superintend the local arrangements in connexion with the Collective Investigation Committee of the British Medical Association.

FIFE AND KINROSS ASYLUM.

For the past few years this asylum has been conspicuous in Scotland on account of the zeal and intelligence with which the boarding-out system has been conducted, and the confidence shown in the method alike by the directors and the medical superintendent for the time being. Commenced by Dr. Frazer, who has, in his now wider field of influence, continued to use strenuous endeavours to the same end and with much success, the boarding-out of pauper lunatics has been a distinct feature in Dr. Turnbull's management. The result up to this year was that the inmates of the Fife Asylum did not show a marked increase, and the expense of otherwise imminent extension was saved, while the patients were happier, more peaceful, and on medical grounds in a more satisfactory condition. This year the force of circumstances has been too strong for Dr. Turnbull, and he has had to admit an increase of seventeen in the resident population, or 334, against 317 last year. The number of admissions (105) was greater than during any year since 1870, and none of the reasons for the increase seem in any way peculiar to the year. The death-rate was rather high, but this may be due to the weeding out of the chronic and slightly affected cases, as well as to "the unfavourable nature of admissions of late years." The male division is now fully occupied, and the ordinary accommodation on the female side is also taken up. "Further experience has confirmed the superintendent's belief in the great utility of the boarding-out system. In a certain number of cases the trial did not prove successful, because in insanity there was very markedly a tendency to relapse, or periodic exacerbations, more or less acute, of the symptoms, and when such relapses occurred, it might be necessary again to have recourse to asylum treatment. The patients boarded out were brighter and more contented, showed a more active interest in the concerns of their daily life, and occupied themselves more usefully and steadily. Many of the patients had likewise benefited distinctly in bodily health by the change."

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

THE results of the recent examinations for the M.B. and of the Second Medical Examination of this University will probably be published some time this week. Considerable

dissatisfaction has been expressed by the extreme severity of the examinations, and it is stated that only 13 candidates out of 130 passed for the Second Medical Examination, and but 40 of 105 candidates for the degree of Bachelor of Medicine. It is rumoured that in Chemistry alone forty candidates one after the other were rejected; but whether this be correct or not, there is no use in disguising the fact that the severity of these examinations will divert a good many intending candidates from the Royal University, and will send them to other licensing bodies for their degrees or diplomas.

COLLEGE OF PHYSICIANS IN IRELAND.

On St. Luke's Day, the 18th inst., the annual election for office bearers will take place. Dr. William Moore is the present President of the College, and, of course, will hold the office for a second year. There are two candidates for the Fellowship of the College—the election to which takes place by open voting—one being a physician practising in Victoria.

EXCISION OF LOWER JAW.

Mr. Lambert Ormsby, of the Meath Hospital, excised the lower jaw on the 3rd inst. The patient, a woman aged twenty-six, first noticed a tumour about eight months since, which slowly increased in size, causing little pain. On Sept. 26th, when admitted, it was about the size of a large orange, extending a couple of inches down the neck. Mr. Ormsby first drew the right lower bicuspid and canine teeth, and made an incision commencing from about half an inch below the lip, extending to the angle of the jaw. By means of a chain saw the jaw was divided at the symphysis, and also at the angle. The vessels having been secured, the wound was washed out with a solution of chloride of zinc, and the parts brought together by wire sutures. Next morning the temperature was 99° and the pulse 80, and since then the patient has been doing well. The tumour was of a fibro-cystic character.

ST. MARK'S OPHTHALMIC AND AURAL HOSPITAL, DUBLIN.

During the year ending March 31st, 751 patients were treated in the wards of this hospital—the largest number ever admitted since its foundation in 1844 by the late Sir William Wilde. The beds (thirty-eight) at the disposal of the staff have not only been filled, but often there have been as many as forty-two inmates, accomplished by putting two in one bed or on mattresses on the floor. The want of a ward in which children could be treated away from other patients has been greatly felt, and it is estimated that for a sum of £800 accommodation for eight additional adult patients and a children's ward containing six to eight cots could be supplied. In order to make the institution available for persons who, although not poor, are yet unable to support themselves in lodgings, arrangements have been made to admit such, on the payment of small sums, varying from 1*s.* 6*d.* to 3*s.* per day. During 1882–3 there were 754 operations in eye cases and 53 in ear cases, making a gross total of 807 during the twelve months.

COOMBE LYING-IN HOSPITAL, DUBLIN.

It is stated that the change in the Charter contemplated by the Governors permitting the Master to retain his tenure of office for more than the stipulated period cannot be carried out. An election for a new Master will shortly take place.

The first annual meeting of the Academy of Medicine will be held on the 26th inst., when the reports of the past session will be submitted, and an election of officers will take place.

PARIS.

(From our Paris Correspondent.)

DR. ROCHARD.

THE state of Dr. Rochard, whose case was reported in THE LANCET of last week, continues unchanged. He is, however, not considered out of danger, and, properly enough, no attempt has been made to extract the bullet. The would-be assassin turns out to be a lunatic, as the individual who committed the deed wrote the Doctor a long letter about four days ago making a full confession of what he had done. He stated that for some days he had been haunted with voices (what Professor Ball terms "hallucinations d'ouïe," hallucinations of hearing), telling him that to remove the spell that was hanging over him he should kill somebody. In order to gratify the voices, and after having wandered about all day, he hid himself behind a tree in the Avenue Gabriel, near the Champs Elysées, where the Doctor resides, and lay in wait for his victim. About seven in the evening Dr. Rochard happened to be passing, and the man fired at him, as, he said, he would have done at any other person who might have passed by at the time. M. Camescasse, the Prefect of Police and nephew of Dr. Rochard, was on a visit to the patient when the letter was received and read. This was, of course, immediately handed to the Prefect, who gave the necessary orders to make a search for the author of the letter. On the same day, however, that individual, who is about forty years of age, having read about the incident in the papers, gave himself up to the commissary of police of his district, and on being submitted to medical examination it was ascertained that the man was out of his mind, and that he had only a few days previously left a lunatic asylum "cured."

INTERNATIONAL SANITARY CONGRESS.

The King of Italy, who takes a lively interest in sanitation, has, through his Foreign Minister, invited the different Governments to take part in an International Sanitary Congress, which is to meet in Rome next month. The object of the congress is to organise an international service in Egypt, with the view of protecting Europe against the intrusion of Asiatic cholera. All the Governments have accepted the invitation with the exception of the French Minister, who is waiting for the completion of Dr. Fauvel's report on the recent epidemic.

WATER TEST.

A French periodical, *La Culture*, gives the following simple method for testing the purity of water. In an ordinary quart bottle three parts filled with water dissolve a spoonful of pure white sugar, cork it well, and put it in a warm place. If at the end of forty-eight hours the water becomes turbid and milky, there can be no doubt of its impurity; but if it remain limpid, it may be considered safely drinkable. But what about the microbes?

WOOD PAVING.

After giving macadam and asphalt a fair trial to replace the stones in the streets of Paris, wooden pavements to a very limited extent were resorted to some few years ago by way of experiment, but they turned out a failure. An English company, however, came over to show the Parisians how the thing is to be done. About a third of the Champs Elysées was last autumn paved with wood by the English company, and the result has been so encouraging that the Municipal Council of Paris have resolved to give the English system a more extensive trial. The French, who are quick to copy, are hard at work in paving some of the principal streets, such as the Rue de Rivoli, the Boulevards, Faubourg St. Germain, and the remaining portion of the Champs Elysées, and it is pleasant to see French and English workmen employed so harmoniously together.

CALMUCKS AT THE JARDIN D'ACCLIMATATION.

A troop of Calmucks have taken the place of the Cingalese, who were encamped in the Jardin d'Acclimatation of Paris last spring. The troupe consists of nineteen persons, men, women, and children, accompanied with camels, horses, and mares with their foal, and sheep with thick tails. Their encampment has a most picturesque appearance, representing as near as possible their mode of living in their own country. Their features are of a strong Mongolian type, they are of wandering habits, living in movable huts, most ingeniously constructed and made of material well suited to the climate of their territory, a region comprised between the Caspian and Aral Seas. They have two priests with them, who are dressed in a gorgeous attire of many colours, and who for a trifling fee offer up prayers by turning a machine in a small box something like a handmill. Their food is very simple but they drink largely of "koumiss," which is a strong alcoholic liquor extracted by distillation from fermented mare's milk, on which they get dead drunk, both men and women.

Paris, October 9th, 1883.

MEMORIAL STONES of a new hospital and dispensary were laid at Darlington on Tuesday by the wife of Mr. Theodore Fry, M.P.

Obituary.

JOSEPH J. H. BARTLETT, L.R.C.P.I., M.R.C.S.

WE regret to announce the death of Mr. Joseph Bartlett, late of Notting-hill. Mr. Bartlett was educated at University College, and as a student displayed considerable aptitude for original research. He contributed to various journals several meritorious original papers, and just before his death he completed the correction of some proofs of a paper connected with natural history. Mr. Bartlett will be long remembered by those who had the happiness to know him as a firm and consistent friend. He was a highly skilful doctor, an upright and honourable gentleman, and his kindness and attention made his patients his fast and warm friends.

THE HIND FUND.

AT a meeting of the friends and former pupils of Mr. George Hind, F.R.C.S., held, by the kind permission of the directors, in the board-room of the Briton Life Offices on Thursday, Oct. 4th, Dr. Richardson, F.R.S., having been voted to the chair, the following resolutions were carried:—

Moved by Dr. Semple, and seconded by Dr. Rogers, "That a fund be organised, to be called the Hind Fund, for the benefit of Mr. George Hind, F.R.C.S."

Moved by Mr. Visger and seconded by Dr. Barton, "That the subscribers to the fund up to the present time, together with future subscribers, form a general committee of the fund, with Dr. W. B. Richardson as Chairman, Professor Tweedy (Treasurer *pro tem.*) as Hon. Treasurer, and Messrs. A. J. Pepper and T. Wakley, jun. (Secretaries *pro tem.*) Hon. Secretaries; and that Messrs. Coutts be asked to be Bankers to the Hind Fund."

Moved by Dr. Royston, and seconded by Mr. J. Pope, "That the Chairman, the Treasurer, and Secretaries of the general committee, together with Col. Richards, Dr. Semple, Berkeley Hill, Esq., Charles Fuller, Esq., Dr. Jackson, Dr. Hakewell, Dr. Duncan, T. Wakley, Esq., Sir E. Saunders, Christopher Heath, Esq., Dr. Royston, Dr. Rogers, F. E. Webb, Esq., and J. Pope, Esq., do form an Executive to dispose of the fund in accordance with the direction of the general committee, but that meanwhile it be left to the discretion of the Executive to draw from the fund such money as may be required for urgent temporary purposes."

The meeting was of an influential character, and the various speakers expressed their high opinion of Mr. Hind's ability and reputation as a teacher, and bore especial testimony to his skill as a draughtsman, while universal tribute was paid to his probity and social qualities.

The meeting was adjourned to Thursday, Nov. 1st, at 5.30 P.M., at the Briton Life Offices.

Messrs. Coutts and Co., besides consenting to act as bankers, have most generously contributed twenty guineas to the fund.

The following additional subscriptions have been received and paid to the account of the "Hind Fund" at Messrs. Coutts' Bank, Strand:—

Messrs. Coutts & Co.	£21	0	Surg.-Major Spence ...	£1	1
J. C. Whaley, Esq. ...	5	0	C. C. Whitefoord, Esq.	1	1
Alfred Grace, Esq. ...	3	3	Gardiner Gould, Esq.	1	1
Henry Smith, Esq. ...	3	3	G. Jackson, Esq. ...	1	1
Dr. Charles Royston..	2	2	A. Stewart, jun., Esq.	1	1
F. Simms, Esq. ...	2	2	Surgeon R. W. Barnes	1	1
Marcus Beck, Esq. ...	2	2	F. Magnuss, Esq. ...	1	1

Subscriptions may be paid to Dr. Richardson, F.R.S., (chairman), Manchester-square; John Tweedy, Esq., F.R.C.S., 24, Harley-street, Hon. Treasurer; A. J. Pepper, Esq., F.R.C.S., 122, Gower-street; and T. Wakley, jun., Esq., L.R.C.P., 96, Redcliffe-gardens, Hon. Secretaries; or to Messrs. Coutts, Strand.

[In the list of subscribers to the Hind Fund published last week, the initials attached to Mr. Purnell's name should have been J. J., *not* A. J.]

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 4th:—

Beressford, Ralph, Prince of Wales'-road, Norwich.
Bullock, Thos. Warren, Spring-grove, Isleworth.
Gostling, John Harry, Halesworth, Suffolk.
Hutchinson, Harry, Oakley-square, Camden Town.
Scott, Arthur William, Coalbournbrook, Stourbridge.
Smith, Albert, Paris Villas, Wakehurst-road, Wandsworth-end.

The following gentlemen also on the same day passed the Primary Professional Examination:—

William Bradbrook, London Hospital; Ithel Penderel Llewelyn, King's College Hospital; Geoffrey Skill, St. Thomas's Hospital.

UNIVERSITY OF CAMBRIDGE. — The following gentlemen have satisfied the examiners in both parts of the Sanitary Science Examination:—

Bartley, A. G., M.D.
Cowen, P., M.R.C.S.
*Day, W. W., M.D.
East, F. W. A., M.B.
*Finlay, D. W., M.D.
Glasier, C., M.B.
*Gripper, W., M.B.
Herring, J. F., L.R.C.P.E.
Hill, R. B., M.D.
*MacRury, C. W., L.R.C.P.E.
*Pearse, T. F., L.R.C.P.
Penny, E., M.B.
*Read, M., M.B.
*Richardson, J., M.B.
Saunders, G. J. S., M.B.,
*Sweeting, R. D. R., M.R.C.S.

*Pupils in the Hygienic Laboratory at University College, London.

MR. T. PRIDGIN TEALE has been appointed a magistrate for the Borough of Leeds.

CARDIFF MEDICAL SOCIETY.—At the opening meeting of the session Dr. Arthur W. Edis has promised to give an address on the Treatment of Metrorrhagia.

A WARRANT was granted by the magistrates at Staines on Tuesday against the sanitary authorities for polluting the Thames with their sewage.

ROYAL RED CROSS.—Misses A. K. Holland and M. Selby, nursing sisters at the Herbert Hospital, have been presented with the Red Cross for competency and devotion in attending on sick and wounded British soldiers.

CITY ORTHOPÆDIC HOSPITAL.—The sum received by this hospital from the trustees of the Rev. Thomas J. Robinson appears to have been £205 14*s.* 3*d.*, not £20, as previously announced.

PRESENTATION.—The inhabitants of Bovey Tracey, Devonshire, have presented their townsman, Mr. H. A. Hodson, L.R.C.P., M.R.C.S., with a substantial token of their esteem and appreciation of his professional services.

QUADRUPLETS.—At Blackburn last week the wife of a labourer was delivered of four children at a birth—two boys and two girls. All were born alive and were perfect in form. The last-born, however, survived but a short time.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, held on the 9th inst., Sir W. N. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £68 was distributed among the several applicants.

THE CONVICT GOULDSTONE.—The High Sheriff of Essex on Wednesday received a communication from the Home Office stating that Gouldstone will be removed to Broadmoor Criminal Lunatic Asylum as soon as the necessary documents can be completed.

MEDICINE AND THE ALCOHOL QUESTION.—At Birmingham, on Wednesday, a conference was held in the Council Chamber to discuss the question of total abstinence in its relation to medical practice. Dr. Heslop (who presided), Dr. Batten, and Dr. Hickinbotham were among the speakers.

STUDENTS' VOLUNTEER AMBULANCE CORPS.—A grant of £350 has been made by the National Aid Society for the Relief of the Wounded in War to Mr. Cantlie, for the equipment of an ambulance company formed of the students of the Charing-cross Medical School. A similar grant will, it is expected, be made to St. Bartholomew's and the London Hospitals for the same purpose.

DR. WILLIAM COLLINGRIDGE, medical officer of the Port of London, has condemned 3388 carcases of sheep imported from New Zealand as unfit for human consumption.

AMBULANCE STATIONS.—At a meeting of the St. Saviour's Board of Guardians on the 4th inst. it was stated that the South-East ambulance station, near the hospital in the Old Kent-road, had been completed and was in operation. The ambulances are fitted with air beds and pillows and all the stations are in telephonic communication with the Asylums Board offices in Norfolk-street, Strand.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—At the first meeting of the twenty-eighth session, 1883-84, held at the Royal Kent Dispensary, Greenwich-road, on Friday evening, Oct. 5th, the following officers were elected for the ensuing session:—President: Mr. G. H. Cable. Vice-Presidents: Dr. A. Forsyth and Mr. John Marshall. Council: Messrs. A. L. Bowen, J. E. Burroughs, F. Carson Fisher, C. H. Hartt, J. Hammersley, F. Moon, and J. P. Purvis. Treasurer: Dr. Prior Purvis. Secretary: Mr. H. W. Roberts. Librarian: Dr. J. B. Saundry.

BEQUESTS TO MEDICAL CHARITIES.—Mr. Henry Couchman, late of Blackheath, bequeathed £200 to each of the following institutions: the London Hospital, the Seamen's Hospital, Charing-cross Hospital, the Brompton Consumption Hospital, and the Royal Kent Dispensary.—Mrs. Catherine Hewson bequeathed £500 to the Hospital for Incurables, £300 to Simpson's Hospital, £300 to Richmond Hospital, £400 to Mercer's Hospital, £400 to Adelaide Hospital, £400 to the City of Dublin Hospital, £400 to Cork-street Fever Hospital, £400 to the Rotundo Hospital, and £400 to the Coombe Hospital.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—A meeting of the committee of management of this hospital was held on the 6th inst., when the usual quarterly report was read. During the three months ending the 30th ult. 960 in-patients were admitted, more than the total numbers received during the preceding half-year from January to the end of June, and a very large increase on the number received during the corresponding quarter of 1882. Of out-patients 118 were treated. Consequent upon the increase in the number of patients there has been a rise in the expenditure, but the receipts from various quarters have also continued to increase.

THE HERBERT MILITARY HOSPITAL.—The recent explosion of war rockets at the Woolwich Arsenal has directed attention to the danger arising from the storage in the hospital at Shooter's-hill of a large quantity of spirits of wine, turpentine, oils, wooden cases, and similar combustible articles. If by any unforeseen accident a fire should break out in these stores, most disastrous consequences would ensue, as the hospital often contains five hundred sick, many of whom are bedridden; and it is consequently proposed to have an inspection of the building by the officials of the Metropolitan Fire Brigade, and to remove the stores to some more secure place.

THAMES VALLEY SEWERAGE.—Mr. J. Mansergh, C.E., and Mr. J. C. Melliss, C.E., have been considering the problem of the disposal of the sewage of the Lower Thames Valley, and have presented their report to the main Sewerage Board. They state that it is better to have one place for the treatment of the sewage than several, and that this one spot must be on the banks of the Thames, the "natural drain" of the whole district. After reviewing the advantages and disadvantages of several sites, they conclude that a site on the Surrey side of the river between Mortlake and Kew is to be preferred. The cost they estimate at £276,647 for the site and necessary works.

ENTRANCE SCHOLARSHIPS AT THE METROPOLITAN MEDICAL SCHOOLS.—*Charing-cross:* The scholarship of £30 has been awarded to Mr. R. E. Fasnacht, and that of £20 to Mr. W. J. Radford.—*Middlesex:* The Science scholarship has been awarded to Mr. H. A. Kidd, and the scholarships of £25 and £20, tenable for two years, to Mr. W. B. Cockill and Mr. C. G. Matthews respectively.—*St. Thomas's:* The scholarship of £100 has been awarded to Mr. C. W. Cooke, Merchant Tailors' Exhibitioner, and that of £60 to Mr. F. Fawssett.—*The London:* The scholarship of the value of £60 has been awarded to Mr. G. G. Borrett, and that of the value of £40 to Mr. C. R. Killick.—*St. Bartholomew's:* The senior scholarship in science, of the value of £130, tenable for one year, has been awarded to Mr. Major Brown, B.A. of Downing College, Cambridge, and Mr. James George Ernest Colby, B.A., of Wadham College, Oxford, equal; the junior scholarship in science, of the value of £130, tenable for one year, to Mr. Horatio George Adamson, and Mr. Frederick Frost Blackman, equal; and the Jeaffreson exhibition of the value of £50, to Mr. John Wilkie, B.A., of Trinity College, Cambridge; the hospital scholarship for the most successful candidate from Epsom College at the last preliminary scientific examination of the London University, has been awarded to Mr. Ludvic William Darra Mair.—*Westminster:* The Houldsworth scholarship, of the value of £40 a year, tenable for two years, has been awarded to Mr. C. J. Lownds; for the second scholarship, of the value of £20, tenable for two years, Messrs. F. R. P. Taylor and C. S. Vines were bracketed equal.—*St. Mary's:* The science scholarships of £50 each have been awarded to Messrs. J. Bays, N. C. Ridley, W. A. Bottomley, and H. A. Kidd; and two exhibitions of twenty-five guineas each to Messrs. M. M. Bird and L. P. Gibson.

THE CONDITION OF THE THAMES.—At a meeting held on the 6th inst., to consider the state of the Thames between Teddington Weir and Isleworth, and the best means of securing an adequacy of water in the river at the lowest state of ebb tide, it was unanimously resolved that a properly constructed lock and weir below Richmond Bridge is the only reliable means of securing such improvement. An influential committee was then formed for the purpose of communicating this resolution to the Conservators of the river Thames, and for taking such other steps as they may think expedient for securing the early construction of a suitable lock and weir. Several subscriptions in aid of the project were promised.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—At the last annual meeting of this society, the following officers were elected for the year ensuing:—President: Dr. T. O. Dudfield. Vice-Presidents: Dr. J. W. Tripe, Dr. W. Armistead, Dr. J. Stevenson, Dr. G. P. Bate. Treasurer: Mr. S. R. Lovett. Hon. Secretaries: Dr. J. N. Vinen, Mr. S. F. Murphy. Council: Dr. Ashby, Mr. W. Blyth, Dr. Bristow, Dr. Buchanan, Dr. Dixon, Dr. Gwynn, Mr. Jacob, Dr. Rowland, Dr. C. E. Saunders, Dr. T. Stevenson, Dr. Thursfield, Mr. Turner. The first meeting of the session will be held on Friday, Oct. 19th, at 7.30, at 1, Adam-street, Adelphi, when the president, Dr. Dudfield, will deliver an inaugural address, entitled, "The Need of Unity in Metropolitan Sanitary Administration."

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALFORD, HENRY JAMES, M.D. Univ. Lond., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Taunton Urban Sanitary District.

ALLEN, Mr. A. H., has been reappointed Public Analyst for the Borough of Wakefield.

ANGEL, Mr. ARTHUR, has been appointed Public Analyst for the Borough of Basingstoke, vice Webb, resigned.

BALY, JOSEPH SUGAR, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Royal Leamington Spa Urban Sanitary District.

BYRN, ARCHDALE EDWARD, L.R.C.P., L.F.P.S.Glas., has been appointed Government Medical Officer at Cairns, Queensland.

COLLIER, WILLIAM, L.F.P.S.Glas., has been appointed Medical Officer for the Central District of the Sheffield Union.

COMYN, EDWARD, M.B., M.Ch.Dub., has been appointed Medical Officer to the Destitute Board for the District of Georgetown, S.A.

COOPER, AUSTIN N., L.R.C.S.I., has been appointed Assistant-Surgeon to the House of Industry Hospital, Dublin, vice Dickinson, resigned.

COX, JAMES WHARTON, M.B., M.Ch.Ed., has been appointed Resident Medical Officer at the Sydney Hospital, New South Wales.

EYRE, J. J., L.K.Q.C.P.I., L.M., & L.R.C.S.I., has been appointed Medical Officer to the Forest-hill Dispensary.

JAMES, WILLIAM DALE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Free Hospital for Children, Sheffield, vice Laver, resigned.

JORDAN, FURNEAUX, F.R.C.S.Eng., has been appointed Consulting Surgeon to the Birmingham Dental Hospital, vice West, deceased.

MASON, ARTHUR E., L.S.A.Lond., has been appointed House-Surgeon to the Tiverton Infirmary, vice J. Allnutt, L.R.C.P.Ed., M.R.C.S., resigned.

PARKINSON, CHARLES HENRY WATTS, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Wimborne and Cranbourne Rural Sanitary District.

REYNOLDS, ROBERT, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Fourth District of the Halstead Union.

WALKER, CHARLES EDWARD, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for No. 5 District of the Aylesbury Union.

Births, Marriages, and Deaths.

BIRTHS.

BROOKHOUSE.—On the 5th inst., at 42, Manor-road, Brockley, S.E., the wife of Charles T. Brookhouse, M.D., of a son.

COATS.—On the 10th ult., at Capetown, South Africa, the wife of Surgeon-Major James Coats, Army Medical Department, of a son.

GAIRDNER.—On the 10th inst., at the College, Glasgow, the wife of Professor Gairdner, M.D., LL.D., of a daughter.

SMITH.—On the 21st ult., at Albyn-place, Aberdeen, the wife of Patrick Blaikie Smith, M.D., of a son.

SYMES.—On the 4th inst., at Wards End, Halifax, the wife of Edmond West Symes, M.D., of a son.

TUKE.—On the 6th inst., at Chiswick, the wife of Charles Molesworth Tuke, M.R.C.S., of a daughter.

WALKER.—On the 4th inst., at Ladbroke-grove-road, the wife of A. Dunbar Walker, M.D., of a son.

MARRIAGES.

GARRETT—GREENWOOD.—On the 29th ult., at Sydney, Australia, Henry Edward Garrett, M.R.C.S.E., third son of the Rev. John Garrett, D.D., Rector of Christ Church, Manchester, to Frances Maud, daughter of the late George Wright Greenwood, Solicitor, late of Serjeants' Inn, and Sunny Bank, Hampstead, and of Mrs. C. Greenwood, Dalby House, Margate.

INGLIS—RYLEY.—On the 3rd inst., at the Parish Church of St. Mary's, Cheltenham, Alexander Inglis, M.D., Cheltenham, to Margaret Helen Thornton Ryley, elder daughter of the late Colonel George Ryley, formerly of the 74th Bengal Native Infantry.

M'DOUGALL — KNOWLES. — On the 3rd ult., at Chatton Church, Northumberland, by the Right Rev. Bishop M'Dougall, F.R.C.S.E., assisted by the Rev. F. Bell, Vicar of the Parish, H. A. H. M'Dougall, M.R.C.S., L.R.C.P.E., of Hambledon, Hants, to Maud Knowles, daughter of Andrew Knowles, Esq., of Swinton Old Hall, near Manchester.

NELIGAN—WILLIAMS.—On the 3rd inst., at St. John's Church, Brixton, James Charles Neligan, L.R.C.S. Edin. and L.S.A.Lond., of Middleton-in-Teesdale, to Kate Emily, second daughter of Alfred Williams, Mem. Inst. C.E., of Great George-street, Westminster, and Brixton.

VORES — HAZLERIGG. — On the 3rd inst., at Goadby, Leicestershire, Arthur Vores, M.R.C.S., fourth son of W. Vores, M.D., of Yarmouth, to Gwendoline Frances, youngest daughter of Sir Arthur Grey Hazlerigg, Bart., of Noseley Hall.

SWEETING—ROTHERY.—On the 9th inst., at Christ Church, Harrogate, by the Rev. D. S. Cowley, M.A., Richard Deane Roker Sweeting' M.R.C.S.Eng., S.Sc.Cert. Camb., eldest son of the late Richard Sweeting, M.D., of Clapham-park, S.W., to Selina (Nellie), third daughter of William Rothery, of Forest Lodge, Harrogate.

DEATHS.

ADAM.—On the 28th ult., at Ardentigh, Port-Bannatyne, Bute, John Mitchell Adam, M.B., C.M., fifth son of the late James Adam, Fruit Merchant, of Glasgow, aged 31.

EVANS.—On the 30th ult., at Isleworth, George Henry Evans, M.D., aged 48.

EVANS.—On the 8th inst., at Penarth, suddenly, in a patient's house, Thomas Evans, M.R.C.S., L.S.A.Lond., of 10, Crockherbtown, Cardiff.

JERVIS.—On the 3rd inst., at Connaught-square, Thomas Jervis, M.D., J.P. for Middlesex and Westminster, aged 73.

SCHOFIELD.—On August 1st, at Tai-Yüen-Fu, North China, after a brief illness, Robert Harold Ainsworth Schofield, M.A., F.R.C.S., B.Sc., &c., of the China Inland Mission, third son of the late Robert Schofield, Esq., of Heybrook, Rochdale.

SEWELL.—On the 2nd inst., at Quebec, Canada, James Arthur Sewell, M.D., Dean of the Faculty of Medicine, Laval University, son of the late Hon. Jonathan Sewell, LL.D., Chief Justice of Lower Canada, in his 75th year.

SWINSON.—On the 10th ult., at Highbury, St. Leonard's-road, Eastbourne, Thomas Spilsbury, M.R.C.S.L., aged 43.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Oct. 11th, 1883.

Date.		Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 a.m.
Oct.	5	30·13	N.W.	50	45	89	56	45	·02	Cloudy
,,	6	30·23	N.	49	46	89	57	43	·07	Fine
,,	7	30·43	W.	49	45	69	57	43	..	Cloudy
,,	8	30·54	N.E.	56	55	70	63	47	..	Foggy
,,	9	30·44	W.	56	54	..	61	54	..	Overcast
,,	10	30·10	W.	54	51	..	60	49	..	Foggy
,,	11	29·89	S.E.	54	52	..	55	51	..	Foggy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

POSITION IN SLEEP.

A CORRESPONDENT has called attention to a statement recently made in regard to the custom mentioned in the Jewish writings of sleeping with the head and feet directed to the north and south. Unfortunately there is some discrepancy in opinion amongst those who advocate this position during sleep. The Hindoos, it is said, believe that to sleep with the head to the north will cause one's days to be shortened, to the south will bring longevity; on the other hand, a physician who died at Magdeburg at the advanced age of 109 (*pace* Thoms) declares in his will that he owed the protraction of his term of life to the fact of his frequently assuming the recumbent position with the head to the North Pole, by which means the magnetic currents pervading the globe are enabled to exert a certain influence on the iron contained in the body. Dr. Reichenbach's odylic force seems to have been similar in its fundamental idea with this, and Dr. Rogers asserts that invalid children with little disposition to sleep may be induced to do so by placing their cots due north and south, with the child's head to the north. There may be some truth in this popular superstition, but we think we can recall some occasions where, though the child assumed every possible position in regard to the magnetic meridian, the "od" force, if acting at all, did anything but conduce to sleep.

Enquirer.—1. B is very delicately and awkwardly situated. It would be right in him to decline seeing the case except in consultation with A, especially if, in his judgment, A was doing his duty by the case. Only very extreme circumstances would justify a practitioner taking a case to which he had been called as a consultant from the practitioner at whose instance he was called.—2. It seems to us very undignified to call on new residents with a view to obtaining new patients.

Mr. H. S. Gordon's (Havre) communication arrived too late for notice this week.

"OTORRHŒA IN ENTERIC FEVER."

To the Editor of THE LANCET.

SIR,—In answer to Dr. Coveney's question, I would remark that otorrhœa, at the beginning of an attack of enteric fever, seems to be a very rare occurrence. Griesinger, in his book on infectious diseases, states that he has met with only one case of enteric fever in which at its commencement otitis of so severe a form was developed that the principal disorder was for a few days quite overlooked. The testimony of such an authority suffices, I suppose, to settle the question.

I am, Sir, your obedient servant,

Rue Marignan, Paris, Oct. 7th, 1883. DAVID DININ.

DIFFERENTIATION OF THE MEDICAL FUNCTION.

THERE is in America a medical society called the "Hay Fever Association," the tenth annual meeting of which was recently held at Bethlehem, N.H. Amongst other matters discussed were the merits and demerits of Townsend's remedy, a composition which did not gain much *kudos* from the debate, as ten of the members had used it, but not one had found it of service. By the way, for the purposes of associative inquiry into the distinctive features of particular diseases, why should the line be drawn at hay fever? Surely a society for the investigation of intestinal catarrh, another for discussing the peculiarities of Bright's disease, others, again, for promoting respectively the study of dyspepsia, mumps, in-growing toe-nail, &c. &c., would be of advantage to the cause of medical science! These several societies, moreover, might select from amongst their members men distinguished for their mastery of detail to form committees to devote attention exclusively to (1) the diagnosis of the affection under the care of the society, (2) its treatment, and (3) its prognosis. The work of the different societies would by this means be pleasantly lightened. The division of labour effected might also be expected to be attended by a quickening of pace in medicine as a science and the perfecting of it as an art. An objection to this high differentiation of the medical function likely to arise from the patients' point of view need only be stated to be summarily dismissed. Thus it would probably become imperatively necessary, in any attack of illness, for the special doctor to be summoned—a hay doctor for a case of hay fever, and so on. Then it would be desirable that the doctor should be accompanied in his visit by a member of each of the committees before mentioned, in order that the diagnosis, treatment, and prognosis might be set forth with absolute precision. All this would of course involve some expense and inconvenience to patients over and above that which obtains on the present imperfect system of medical attendance. This drawback, however, as we have intimated, is not worthy of a moment's consideration beside the magnificent result which might be confidently looked for—namely, the removal of the reputed popular distrust in the certainty of medicine, and the placing it at once and for ever in the rank of the exact sciences.

J. T.—There are two universities in New Zealand, and both grant degrees in medicine, which, however, do not entitle their holders to practise. Any person, we believe, may register as a practitioner in medicine or surgery who possesses a degree or diploma entitling him to practise in any civilised country, provided such degree or diploma has been granted after a curriculum of three years' duration. A licence to practise may be obtained of the Board of Medical Examiners after an examination passed before them. See Wooton's Guide to the Medical Profession (Upcott Gill, Strand).

"AN EXTRAORDINARY CIRCULAR."

To the Editor of THE LANCET.

SIR,—My attention has just been drawn to a paragraph in your issue of Oct. 6th with the above heading. I cannot help thinking that you have published this under a misunderstanding in regard to the circumstances. Having disposed of my practice to Dr. Wilson, I was frequently asked by my patients what were Dr. Wilson's qualifications, and what experience he had had; and I therefore, as the simplest means of informing them, had the circular you refer to printed exclusively for my patients, and in no case, as far as I am aware, has it been sent to any other. I may add that, before having the circular printed, I submitted the proof to some of the leading members of the profession in Edinburgh, who expressed entire approval of it. I cannot myself see how, if I was entitled to sell my practice, I could do otherwise than take some such means of informing my patients as to the position and experience of my successor. As I entertain no doubt that you have been misled in this matter, I have every confidence that you will do all in your power now to relieve Dr. Wilson of the stigma which you have placed on him, and I shall be glad to hear from you to that effect.

I am, Sir, yours very sincerely,
West Newington House, Edinburgh, ADAM JARDINE.
Oct. 7th, 1883.

P.S.—I enclose circular issued by me.

*** We gladly insert Dr. Jardine's letter, but we cannot subscribe to his opinion that it is right to put the merits and the marriage of a successor into circular form for wide distribution. Such a course is certainly very unusual, and would open the door to every kind of advertisement.—ED. L.

Dr. C. Yelverton Pearson.—If the paper be forwarded, it shall have due consideration.

BACTERIA NOT THE CAUSE OF DISEASE.

To the Editor of THE LANCET.

SIR,—Dr. Rollin Grigg, of Buffalo, doubtless hit the right nail on the head when he wrote that bacteria is only another form of fibrine.

I am, Sir, yours, &c.,
J. CARRICK MURRAY, M.D.
Newgate-street, Newcastle-on-Tyne, Oct. 8th, 1883.

HEREDITARY SHORT-SIGHTEDNESS.

CONSIDERABLE attention has lately been paid in Germany and Switzerland to the question of the increase of myopia amongst school children and students generally. Dr. Cohn has, in a recent number of the *Gesundheit*, summarised various statistics on the question of hereditary short-sightedness, which have from time to time been collected by Erisman, Scheiding, Pflüger, and other authorities on the subject. The researches of the last-named writer resulted in the following facts being elucidated as to the percentage of short-sighted pupils:—Public schools: Without predisposition, 8 per cent.; with predisposition, 19 per cent. Higher schools: Without predisposition, 17 per cent.; with predisposition, 26 per cent. The difference of about 10 per cent. in favour of those children without an hereditary predisposition to short-sightedness is, according to Pflüger's opinion, a reliable basis of argument. At the same time, he asserts that this relatively low figure is arrived at after the necessary elimination of those cases where the predisposition has remained latent, and where it is of such a nature as only to become the source of ocular affection under circumstances of an unfavourable character. The quoted opinions of oculists, such as Von Arlt, Kotelmann, Loring, Nicati, and Javal, vary from each other in the manner of regarding the question at issue. Those who acknowledge the existence of such a predisposition consider its importance should not be over-estimated. The statistics published on the matter are regarded as hardly sufficiently conclusive to allow of a definite solution of the question at the present moment.

HEMIPLEGIA AND TYPHOID FEVER.

ALTHOUGH cases of hemiplegia in connexion with typhoid fever are by no means very rare, yet they possess the interest of the little known. An instance of aphasia and right hemiplegia with hemianæsthesia occurring in the course of typhoid fever is recorded in *L'Union Médicale* for Oct. 2nd. The symptoms had not departed two months after their onset. M. Sorel regarded the case as one of embolism of a branch of the left Sylvian artery about the "knee" of the internal capsule.

Mr. J. C. Smith.—The question has been repeatedly answered in our columns. Our correspondent may refer to THE LANCET of July 14th last, p. 88.

Mr. Ray Lankester.—The P.S. arrived too late to be appended to the letter.

Dr. J. K. Spender.—The paper will appear in an early number.

COCKADES, CHURCHWARDEN DEGREES, AND ASSUMED TITLES.

To the Editor of THE LANCET.

SIR,—In *The Times* of Friday, Oct. 5th, 1883, is an article which throws some light on the privilege of using a cockade, a point which I have in vain searched for in cyclopædias and other works of standard information. I have long wondered by what rule medical men have sported a cockade on a servant's hat, as if by right. The cockade has a great attraction for certain persons of the *demi-monde*, swindlers, sham military folk, so-called captains, and others, whom it is not desirable medical men should imitate. Confusion with regard to medical titles often proceeds from inadvertence and ignorance; at other times it is complimentary on the part of the clergyman, who speaks of his churchwarden as "Dr. This or That," and the mistake is not contradicted by those flattered. I have never known D.D., M.A., or other university title applied to the name of a verger or sexton of any parish.

I am, Sir, yours truly,
Oct. 10th, 1883. MEDICUS.

To the Editor of THE LANCET.

SIR,—Mr. J. E. Cussans writes to *The Times*, Oct. 5th, 1883, as follows:—"Doctors' servants, who are very commonly cockaded, have no right to the badge unless the names of their masters appear in the Army or Navy Lists." This information may be useful to some of your readers.

I am, Sir, yours truly,
Halifax, Oct. 5th, 1883. M.D.

H. F. C. E.—Probably under the circumstances Bournemouth would be the most suitable for residence.

L.R.C.P. Ed.—We think the qualification justifies the use of the title mentioned.

Medicus.—Pratt and Sons, 23, Tavistock-street, Covent-garden.

"A NEW DOCTOR FOR BELFORD."

To the Editor of THE LANCET.

SIR,—I have overlooked until now your reference to the above in THE LANCET of Sept. 15th. After such reference, and being the graduate in question, I think it only fair to myself to state publicly, by your kind permission, that I was not, either directly or indirectly, responsible for the contents of the paper slip sent to you; nor, so far as I know, was any intimate friend of mine so responsible. This being so, I have neither time nor inclination to take further notice of your anonymous sender of paper slips.—I am, Sir, yours very respectfully,

Belford, Oct. 9th, 1883. M. CLARK, M.B., C.M. Edin.

THE BEN NEVIS OBSERVATORY.

ALTHOUGH a considerable sum is still required to equip this observatory on a scale worthy of its importance, enough money has already been raised to justify the directors in starting the practical work of the undertaking, and the experience of a winter's work will do much to enable them to provide against the difficulties that will undoubtedly arise next year when additional buildings and continuous registering apparatus will be provided. The observatory will be occupied during the present winter by a superintendent and two assistants, and as the summit of the mountain is liable to be cut off for weeks at a time from intercourse with Fort William, it will be provisioned for six months. An interesting account of the scheme has been published by the directors, and serves as a ticket, entitling the holder to ascend Ben Nevis by a new path six feet wide, and with gradients nowhere exceeding one in five, which has been recently constructed, and by the use of which the ascent can be made without much effort in about two hours and a half.

THE REMAINS OF HARVEY.

WE are requested to draw attention to an error in a recent announcement by a lay contemporary that the remains of Harvey are interred at Hemel Hempstead, in Hertfordshire, and that from that place they would be removed on the 18th inst. This is not correct. Harvey was buried at Hempstead, in Essex, about seven miles east of Saffron Walden, and it is at that place that the ceremony will take place on the 18th.

SEWAGE DISPOSAL AND SEWER VENTILATION.

To the Editor of THE LANCET.

SIR,—If the correspondent who signed himself "A Provincial Medical Officer of Health" in THE LANCET of Sept. 29th will send me his name and address, I shall be pleased to describe to him how all the sewage of London and other towns can be effectually disposed of without discharging anything into river or sea.

The time will come when authorities will not be so intensely dull as to continue to provoke the inroad of disease by polluting rivers and the sea. The change will be a mighty one, but where local authorities are stupid or perverse, the Government will have to force upon them the plain teaching of science and the adoption of nature's unerring law. When a right system of sanitation is adopted in our towns, there will not be an excuse to allow the foul gas of sewers to pollute the atmosphere, thereby causing people to inhale disease. If sanitary science and so-called "sanitary engineers" cannot get rid of sewer gas without poisoning streets and houses, and prevent as well the reproduction of foul gas in sewers, then sanitary scientists and sanitary engineers, notwithstanding their use of the "blowpipe" at meetings of congress and institute, will but ill deserve the honour so intensely scrambled for of being benefactors to the human race. When will men learn that the proper place for sewer gas is the sewer; learn, too, to exclude it from houses and streets, and secure to themselves and others healthy houses and healthy towns?

The mode of sewer ventilation, which I think you have unduly lauded, and respecting which it seems experiments are being made at Manchester, is, after all, a very complex and imperfect affair. The principle is no longer new. It was enunciated by me at one of the early meetings of the Sanitary Congress, and amply published. The difference between the Manchester plan and my own is that the Manchester system is complex, more costly, and possibly dangerous; my own recommendation, on the other hand, is cheap permanent, efficacious, and automatic. Can there be any doubt which is the better of the two?

I am, Sir, your obedient servant,

Southsea, Portsmouth, Sept. 30th, 1883. W. HEMPSON DENHAM.

Justitia.—We have good reason to believe that the examinations are conducted with perfect fairness and impartiality, and we see no necessity for the change suggested by our correspondent.

"INDUCTION OF PREMATURE LABOUR."

To the Editor of THE LANCET.

SIR,—I observe in your impression of Saturday last a letter from Dr. Harry Leigh Atkinson on the immediate induction of premature labour. It occurred to me only the other day to proceed very much as your correspondent appears to have done. My patient, the mother of three children, had two months ago been under my care for extreme nervous debility. I was summoned to her last week on account of several attacks of hæmorrhage she had had during the three previous days, she being then in the sixth month of her fourth pregnancy. On examination, I found the os dilatable, but not dilated, and there were no labour-pains. I introduced a finger and punctured the membranes, and then, having gradually dilated the os with my fingers and finding the head presenting, I extracted with the forceps and expressed the placenta. I then administered a drachm of liquid extract of ergot, and injected the uterus with perchloride of iron. The patient made a good recovery. I may add that I have on several other occasions induced premature labour and sufficiently dilated the os uteri by the introduction of my fingers, and always with a favourable result.—I am, Sir, your obedient servant,

JAMES ROCHEID FORREST, M.R.C.S., &c.,
Medical Officer for the Brandesburton District of the Skirlaugh Union, East Riding, Yorks.

Brandesburton, Hull, Oct. 1st, 1883.

ORTHOPÆDICS IN ITALY.

FROM a report which has been published by a medical association in Italy, it would seem that the charitable institutions which have been founded at Milan and Turin within the last twelve years for the benefit of deformed children are doing great good. Signor Gamba, who has charge of the schools—as they are called—at Turin, does not use an orthopædic apparatus for rectifying the deviation of the bones, but makes gymnastic exercise the basis of his mode of action. He says that the children not only take great delight in these gymnastics, but that they gradually acquire considerable proficiency, and that most of them are either cured or very much improved in the course of two or three years. He says that of 197 children received and treated in 1876, 38 were discharged as cured, while 78 were on the road to recovery, and that, as a rule, an exostosis would disappear at the end of one or two years. Of 252 children located in the Turin schools, a like proportion were discharged cured, and the report of the physician at the head of the Milan school is much to the same effect. The experiment is one which might be worth trying in London, as it is about to be in Paris.

WHAT NEXT?

A CIRCULAR is sent us which has been received from some wine merchants by a medical practitioner offering liberal terms for any recommendation of old and rare vintage wines.

ON THE IMMEDIATE APPLICATION OF THE SPLINT IN THE TREATMENT OF WHITLOW.

To the Editor of THE LANCET.

SIR,—As to the origin of whitlow, there is, it is well known, some difference of opinion, the acute inflammation in this painful affection having been described as beginning in the periosteum by some, and in the tendon by others. I incline to the belief that it invariably begins in the sheath of the tendon, and, from the consequent tension induced, successively invades the surrounding tissues.

Whatever may be its origin, however, no doubt can be entertained as to the desirability of early and deep incision. This incision, however, if not followed up by careful and special treatment, will not, in all probability, prove the end of the difficulty. The rule is for extensive suppuration to set in, and to lead to sloughing or considerable contraction of the tendon, preceded by the "departure" of the patient to some one of the many charlatans in the shape of "finger" and "bone-doctors," who abuse the surgeon and drain their victim's pocket at the same time that they hinder the natural process of cure by strapping up the offending member in innumerable rags of salve, and wait for "the bone to come out." Indeed, unless "the bone comes out," the wretched dupes are taught that the case is not one of genuine whitlow, but of "sore finger" only.

The special treatment I refer to is the immediate application of the splint upon the opposite aspect of the finger and a modified antiseptic dressing, such as protective oiled silk or gutta-percha tissue and lint wrung out of diluted alcoholic solution of coal tar, or a salicylic silk dressing. This should be changed every day for the first two or three days, and then less often, according to the severity of the case. The splint is the one essential. All movement, whether voluntary or otherwise, must prevent the union of the edges of the sheath, which has been opened either by the inflammatory process or by the knife, and without a splint perfect rest is impossible.

I am, Sir, your obedient servant,

Clayton-le-Moors, Oct. 6th, 1883. C. R. ILLINGWORTH, M.D.

Mr. J. Ward.—We are not aware that it is possible now to receive diplomas in midwifery without possessing other qualifications. Qualification in midwifery is not legally required—in other words, does not exist in a legal sense.

Mr. H. E. Clark (Glasgow).—The paper is marked for early insertion.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—I wish to make an appeal to the members of the profession on behalf of the widow and four young children of the late Mr. Boast, surgeon, of Wymondham, Norfolk. After practising there for many years, he died last year, leaving his family almost totally unprovided for. He had a lingering illness, the expenses of which, including those of a locum tenens, &c., swallowed up to a considerable extent what small means he had. Such cases as these are all arguments in favour of some form of provident association as a means of help in sickness and provision for the family in case of death. I am permitted to say that the case is recommended by, and reference may be made to, Mr. Wm. Cadge and Mr. Burton, both of Norwich, the latter of whom has consented to act as treasurer and secretary to the fund. Subscriptions may also be paid to myself, or to Mr. J. D. Allman, care of Messrs. Hewlett and Son, wholesale chemists, Charlotte-street, Great Eastern-street, E.C. The following subscriptions are promised:—

Mr. Wm. Cadge ..	..	£5	0	0	Mr. G. H. Burton ..	..	£1	0	0
Mr. Haves Robinson	..	3	0	0	Mr. Hughes.. ..	..	1	1	0
Mr. G. Jackson ..	..	2	2	0	Mr. J. D. Allman ..	..	0	10	6

Further subscriptions will be duly acknowledged.

I remain, Sir, yours very sincerely,

18, George's-terrace, Plymouth, Oct. 6th, 1883. G. JACKSON.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Walley, Edinburgh; Sir E. Lechmere; Dr. Renton; Dr. Illingworth, Clayton-le-Moors; Dr. Slade-King; Mr. R. R. Anderson, Carmarthen; Dr. Mackie, Alexandria; Dr. Macdowall, Quetta; Mr. G. Jackson, Plymouth; Mr. A. Jardine, Edinburgh; Dr. R. A. Anderson, Belfast; Mr. Horsley, Brighton; Dr. Bampton, Plymouth; Mr. W. T. Grant, Birmingham; Mr. Prideaux, Wellington; Dr. M. G. Evans, Cardiff; Mr. Jefferson, York; Dr. J. P. Steele, Rome; Mr. Horder, Cardiff; Mr. Harold Hendley, London; Mr. Derenth, London; Mr. Ladkam, London; Mr. Paul, Liverpool; Dr. Iliff, Newington; Mr. J. Lowe, Workington; Dr. Corner, London; Dr. Dinin, Paris; Mr. Carpenter, Teignmouth; Dr. J. T. R. Davison, Port Said; Mr. Morgan, London; Mr. Martindale; Messrs. Maclehose and Sons, Glasgow; Dr. Marshall, Doncaster; Mr. Rennie, Scarborough; Dr. Makenzie, Winchfield; Messrs. Livingstone, Edinburgh; Mr. Venosta, Brighton; Mr. Milne, Kendal; Mr. T. Cooke, London; Dr. Macadam, Edinburgh; Dr. Novel, Curacoa, West Indies; Mr. Warner, Sheffield; Dr. Whitla, Belfast; Messrs. Penshard and Son, Taunton; Messrs. Burroughs and Co.; Dr. Horsley, Thirsk; Mr. Tompson, Gloucester; Dr. Pearson, Cork; Mr. Pollard, Edinburgh; Mr. Clapton, Bournemouth; Mr. Barton, Gipsy-hill; Dr. O'Hara; Dr. FitzHenry, Mentone; Mr. M'Henry, Cerne Abbas; Mr. Clark, Streatley; Dr. Brookhouse, Brockley; Dr. Klinglesmith, Indiana; Mr. Gamgee, Birmingham; Mr. Pollard, Edinburgh; Mr. M. Clark, Belford; Mr. Hugh Smith, Farningham; Mr. H. Stear, Saffron Walden; Dr. Arthur, Brighton; Dr. Maclean, Glasgow; Mr. D'A. B. Carter, Shipley; Messrs. Kegan Paul and Co.; Mr. Cavelier, Coventry; Dr. Crosswell Hewitt; Dr. Prusn; Mr. Scott, Manchester; Mr. Birchall, Liverpool; Messrs. Mottershead and Co., Manchester; Mr. Savage, Bridlington; Messrs. Daniel Smith and Co., London; Mr. Townsend, Exeter; Dr. de Havilland Hall, London; Dr. Octavius Sturges, London; Mr. Alfred Lewis; Mr. G. P. Field, London; Mr. Kite, West Bromwich; Mr. Ruspini; Mr. Garbutt, Birmingham; Dr. Ashby; Zero; Semper Hilaris; M.B.; J. B. J.; Z.; Prescot; C. A., Preston; Vera; L.R.C.P. Ed.; Medicus; X.; Enquirer; Justitia; J. T.; Epicurus; X.; Doctor, St. Leonards; One of the Guardians; D. Z.; W. P.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Taylor, Kirkhow; Mr. Mackay, Esk; Dr. Middleton, Bradford; Mr. Brown, Sunderland; Mr. Harrison, Sherburn; Mr. Harwich; Mr. Guiness, Richmond; Messrs. Porteous and Co., Glasgow; Messrs. Lee and Martin, Birmingham; Mr. Stead, Hednesford; Mr. Sharp, Walsall; Mr. Clegg, Kingsland; Mr. Mackintosh, Allerton; Dr. Clegg, Bacup; Mr. Willing, Birmingham; Mr. Maycock, Leamington; Dr. Duckett, Great Yarmouth; Miss Fisher, Wolverhampton; Mr. Treves, London; Mr. Moxon, Harrogate; Mr. Field, London; Mr. Warner, Sheffield; Mr. H. Bigg, London; Dr. Tomkins, Manchester; Messrs. Leader and Sons, Sheffield; Mr. Crawford, Newcastle-on-Tyne; Mr. York, Falkam; Mr. Gutteringe, Malvern; Mr. Evans, Cardiff; Dr. Fraser, Clithero; Mr. Stewart, Birkenhead; Mr. Saunders; Dr. Davidson, Aberdeen; Messrs. Hutchinson and Co., Bishop Auckland; Mr. Owen, Huddersfield; Dr. Keeling, Sheffield; Mr. Bache, Birmingham; Mr. Wilson, Falkirk; Mr. Abbott, Sheffield; Mr. Roberts, Alfreton; W. W., Kirkdale; S., Liverpool; G. P.; Ariston; A. Z., Bradford; Wilson, Birmingham; M.D.; Medicus, Manchester; C. A., Preston; Alpha, Edinburgh; Lady Superintendent; H. A. K., Twickenham; Medicus, St. Helens; J. O. S., Brompton; Forceps; Transfer, Leeds; C. H. G., Tattershall; Z.; Fides, Chiswick; Medicus, Goswell-road; B. A., Bayswater; Pharmacy; Ignotus; C. O., Huntingdon; M. C.; Rusticus; R., Manchester; J. J. N., Lewisham; E. B. D., Clacton-on-Sea; &c., &c.

West Cumberland Times, Hertfordshire Mercury, Cambridge Independent Press, Bombay Gazette, Midland Medical Miscellany, Merthyr Express, El Ensayo Medico, &c., have been received.

Medical Diary for the ensuing Week.

Monday, Oct. 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, Oct. 16.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Lympho-sarcoma of the Gastro-intestinal Mucous Membrane; Tumour of the Bladder; Congenital Growth in the Orbit; Tumours of the Brain; Gastritis in a Bear; Sebaceous Cyst from Finger; Congenital Malformation of the Heart; Gumma of Dura Mater and Syringo-Myelus; Rickets in the Monkey (three cases).

Wednesday, Oct. 17.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, Oct. 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

HARVEIAN SOCIETY.—8.30 P.M. Mr. A. L. Silcock, "On some Points in Connexion with the Origin of Talipes Varus."—Dr. W. Squire, "On Normal Growth-rate in Infancy and Childhood."

Friday, Oct. 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 20.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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